In August 2002, Dr. James McDonald announced that he would retire on August 31, 2003 from the Department of Civil Engineering (CE) after nearly 39 years of service to Texas Tech University. Dr. James Smith, Interim Dean of the College of Engineering, appointed Dr. H. Scott Norville as Interim Chair. A national search began for a permanent chair. On July 1, 2004, Dr. Pamela Eibeck, new dean of the College of Engineering, named Dr. Norville as Chair of the Department of Civil Engineering. The Department of Civil Engineering employed Dr. Norville beginning in January 1981. During this time he has participated in tornado chases and tornado damage surveys with the Institute for Disaster Research. He served as Director of the Glass Research and Testing Laboratory and directed numerous theoretical and experimental investigations concerning glass strength and behavior. He began investigating blast resistance of window glass and window glass constructions. His efforts in this area have led to development of test standards and design standards for blast resistant glazing. Dr. Norville serves as chair of several ASTM committees that write standards pertinent to window glass design. Dr. Norville is the author or co-author of over 60 technical papers and reports on glass behavior and strength and several computer programs that design glass. In addition, he has served as a consultant on numerous glass and wind projects.

Dr. Norville states that his goals for the department consist of maintaining and enhancing our demonstrated excellence in research, teaching, and public service, while simultaneously maintaining departmental congeniality.
CHAIRMAN’S CORNER

For those of you who don’t know me, I came to Texas Tech in January of 1981 while finishing my Ph.D. at Purdue University. Subsequently, I spent 22 years serving as a faculty member. Now I have moved to the Dark Side, ADMINISTRATION, for some indeterminate period. I assumed the role of Interim Chair for the Texas Tech Civil Engineering Department in September 2003 upon Jim McDonald’s retirement. In July 2004, the new Dean of the College of Engineering, Dr. Pamela Eibeck appointed me as Chair.

When I interviewed for an Assistant Professor position far too long ago, Jim McDonald, then a Professor, explained that I would need to perform in three areas: teaching, research, and service. The CE Department currently performs extremely well in all these areas. The CE faculty is comprised of 22 full time faculty members. The numerous awards that CE faculty members have won for excellence in teaching, research, and service over the years attest to the Department’s Excellence.

CE faculty members have consistently been honored by students, by the College of Engineering and by the University for their teaching excellence. Another measure of teaching excellence comes from the high demand that the industry has for our graduates. Judging by this demand, we must be doing something correctly. The CE Department has six faculty members who are members of the Texas Tech Teaching Academy, a group of approximately 10% of the university faculty that represents the best teachers in the University. Finally, I observe that our CE students have consistently had the highest passing rate on the Fundamentals of Engineering (FE) examination in the College of Engineering. Some of the credit for this should go to our fine faculty, but the primary credit should go to the students who succeed due to their great work ethic. By any measure, our graduates compare most favorably to those from other Texas universities, I might add.

Similarly, we can assess research efforts of the CE Department in many ways. I’ll begin by looking at research funding. Over the past few years in the College of Engineering, CE has ranked first or second in total research funding and has consistently had the highest amount of research funding per faculty member. In fact, CE has fallen within the top five funded departments at Texas Tech over the past five years. With two exceptions, those departments that had higher total amounts of research funding earned that distinction because they had more faculty members. All of our full professors have international reputations in their areas of expertise, with numerous publications supporting their reputations.

Finally, CE Department faculty members perform service activities at all levels. CE faculty members help the department management and operations through their service on various committees. Similarly, their service on College of Engineering committees helps management and operations at that level. Several faculty members participate in educational outreach programs with local schools, explaining the practice of Civil Engineering to young students. Most importantly, though, many of our faculty members perform service at the national and international level. Much of this service relates directly to their research. At this level, faculty members serve, for example, on editorial boards for journals and on committees that write standards and building codes. This is important work. In addition, many of our faculty and staff provide community service through their churches and other organizations such as Habitat for Humanity.

I am very proud of the Civil Engineering Department. The faculty and staff make it exceptional. I want to see the Department’s stature continue to grow while I serve as Chair.

DR. MEHTA ELECTED TO NATIONAL ACADEMY OF ENGINEERING

P. W. Horn Professor of Civil Engineering, Dr. Kishor Mehta, was elected to the National Academy of Engineering and is Texas Tech’s first professor to receive this distinguished award. He was honored for his systematic studies of structural damage caused by windstorms and leadership in the development of structural design standards for wind loads.

Election to the National Academy of Engineering is among the highest professional distinctions accorded to an engineer in the United States. Academy membership honors those who have made important contributions to engineering theory and practice, including significant contributions to the literature and those who have demonstrated accomplishment in the pioneering of new fields of engineering, making major advancements in traditional fields of engineering or developing/implementing innovative approaches to engineering education.

Texas Tech University
**INTRODUCING NEW FACULTY**

**ANDREW BUDEK, PH.D.,** joined the Civil Engineering Department in September 2002, as an Assistant Professor. His wife Barbara came to Lubbock with him. His educational background includes a B.S. and M.S. in Mechanical Engineering from the University of California, Santa Barbara, and a M.S. and a Ph.D. in Structural Engineering, from the University of California, San Diego. Prior to arriving on campus, Dr. Budek was Assistant Professor, Department of Technology, Southwest Texas State University, San Marcos, Texas. At Texas Tech, Dr. Budek is undertaking new initiatives investigating fatigue and creep in reinforced concrete.

**JOHN MCENERY, PH.D.,** joined the Water Resources Center of the Civil Engineering Department in September 2003, as an Assistant Professor. Prior to coming to Texas Tech he was a Visiting Research Scientist with the National Oceanic and Atmospheric Administration’s National Weather Service - Hydrologic Research Laboratory (River Mechanics Division). Dr. McEnery is a licensed professional engineer, and a practicing consulting engineer. He earned his Ph.D. in Civil Engineering from Clemson University, while his B.S. and M.S. degrees in Civil Engineering are from the University of Missouri – Rolla. Dr. McEnery’s research interests are in hydrology, river hydraulics, and the interaction of surface water and ground water.

**AUDRA MORSE, PH.D.,** joined the Civil Engineering Faculty in September 2003, as an Assistant Professor. She works in Water Resources in Environmental Engineering. Her husband, Steve, is also a doctoral student in the Department. Dr. Morse has been part of the CE staff for the past several years while she completed her B.S. and M.S. in Environmental Engineering and her Ph.D. in Civil Engineering, all from Texas Tech. Dr. Morse is involved in several areas of research. Her main focus has been on an ongoing project with NASA at the Johnson Space Center on recycling wastewater. She now serves as co-advisor with Dr. Sanjaya Senadheera for the Murdough Student Chapter of the American Society of Civil Engineers. Dr. Morse is heavily involved in environmental research. Despite her youth, she has gained significant recognition for her excellent classroom teaching.

**ANDREW SWIFT, PH.D.,** became Director of the Wind Science and Engineering Research Center (WISE) in September 2003, after spending more than 20 years as a professor of Mechanical Engineering at the University of Texas at El Paso, the last eight of which were spent as Dean of the College of Engineering and Director of the Center for Environmental Resource Management. His wife Linda accompanies him. He is a native of Troy, New York. His background includes pilot training at Reese Air Force Base and six years of military service first as a pilot in Viet Nam and later as a flight instructor. He completed his engineering graduate work at Washington University in St. Louis where he began his research in wind turbine engineering. Dr. Swift has worked in wind energy research for over 25 years. In 1995, he received the American Wind Energy Society Academic Award for continuing contributions to wind energy technology as a teacher, researcher, and author. Dr. Swift hopes to expand research areas of WISE, to include wind power.

**XINZHONG CHEN, PH.D.,** joined the Civil Engineering faculty in September 2004, as an Assistant Professor. His wife, Michelle, and son, David came to Lubbock with Dr. Chen. Dr. Chen works with the faculty in WISE. He received his B.S. from Southwest Jiaotong University and his M.S. degree from the China Academy of Railway Sciences, both in the People’s Republic of China. He earned his Ph.D. at Kyoto University in Japan. Prior to coming to Texas Tech, he worked with Assan Kareem at Notre Dame as a post-doctoral Research Associate. He currently teaches Structural Dynamics. Dr. Chen’s research interests are Structural Dynamics, Bridge and Building Aerodynamics, Cable-Supported Bridges, and Wind Engineering.

**HONGCHAO LIU, PH.D.,** joined the Civil Engineering Department in September 2004, as an Assistant Professor. Dr. Liu received his B.E. degree from Habei University of Technology and his M.S. degree from Tsinghua University, both in the People’s Republic of China. He earned his Ph.D. from the University... Continued on page 4
CHARLES NEWHOUSE, PH.D., is the newest member of the Civil Engineering faculty, joining the Department in September 2005, as an Assistant Professor. Dr. Newhouse, his wife Rachel and their two children, Benjamin and Lydia, moved to Lubbock from Christiansburg, Virginia. He received his B.S., M.S.C.E. and Ph.D. degrees from Virginia Tech. In addition to his academic career, Dr. Newhouse worked for several years as a consulting engineer. Dr. Newhouse teaches in the Structures Area. His research interests center on how new high performance materials and construction methods influence the behavior of reinforced concrete and prestressed concrete structures. Dr. Newhouse works with research faculty in WISE and TechMRT.

We are pleased to welcome our new faculty to the Civil Engineering Department at Texas Tech University.

W. PENNINGTON (PENNY) VANN, retired May 31, 2004, after 32 years of service to Texas Tech University. Dr. Vann has more than 33 years of design, research, teaching, and consulting experience, most concerned with structural engineering. In the structural field, Dr. Vann has concentrated on problems involving dynamic behavior and buckling, including the analysis of the dynamic response of buildings, bridges, aircraft shelters, mobile homes, transmission lines, cables, flat plates, and other structures subjected to earthquake, wind, and blast loadings. He also studied the nonlinear static and dynamic response of thin glass plates subjected to blast loads, the static and dynamic behavior of tied arch bridges subjected to wind and traffic loads, the response of transmission power lines to the dynamic effects of winds, the use of welded wire fabric in prestressed concrete beams, and the use of glass fiber-reinforced polymer reinforcement in concrete bridge decks. Since retiring, Dr. Vann has enjoyed traveling and working with Habitat for Humanity. Oh yes, and he has graciously agreed to teach part time in the Civil Engineering Department when needed.

JAMES R. MCDONALD — After 39 years of service to Texas Tech University, Dr. McDonald announced that he would retire on August 31, 2003. Dr. McDonald became the Civil Engineering Department Chair in 1997 and held that position for six years. After earning his Ph.D. from Purdue, Dr. McDonald began his service at Texas Tech as an Assistant Professor in 1966. During his tenure he taught 22 different CE courses. He, along with Dr. Claborn, developed the capstone design course, a course required for all BSCE graduates. After the Lubbock Tornado of May 11, 1970, Dr. McDonald and his colleagues began to study the behavior of structures subjected to tornado winds and debris impacts. He pioneered the field of tornado hazard assessment. He and his graduate students built a tornado cannon for simulating the impact effects of windborne debris on various building materials. Dr. McDonald continues to teach at Texas Tech part-time and engages in wind engineering consulting with his long-time partner and colleague, Kishor Mehta.

KISHOR C. MEHTA, retired from Texas Tech University on July 31, 2003, after 39 years of service. He was, and still is, a great asset to Texas Tech University. Dr. Mehta continues to contribute to research and education. He is the Principal Investigator on the NSF IGERT Grant Multidisciplinary Program in Wind Science and Engineering and also continues to conduct research and administer the NIST/TTU Cooperative Agreement on Windstorm Mitigation Initiative program. As an educator and researcher, Dr. Mehta has contributed to the emerging field of wind engineering. The disastrous tornado in May 1970, marked the beginning of his career in wind engineering. His systematic study of 98 structures damaged by the tornado was the first from an engineering perspective. From this initial study an internationally recognized program of education, research and public service related to wind engineering emerged at Texas Tech University. Dr. Mehta became the first Director of the Wind Science and Engineering Research Center. In 1991, Dr. Mehta became the Paul Whitfield Horn Professor of...
Civil Engineering, the highest honor awarded to a faculty member at Texas Tech. He is also recognized with Honorary Membership to ASCE and has been elected to the National Academy of Engineering. Over the years, Dr. Mehta has made a great contribution to education and research.

TONY R. MOLLHAGEN, retired on May 31, 2003, after 21 years of service to Texas Tech University and Texas Tech University Health Sciences Center. During his tenure in Civil Engineering as Assistant and Associate Professor and Director of the Environmental Science Lab, Dr. Mollhagen frequently met with prospective students and their parents. He patiently answered all their questions and concerns. Besides teaching Limnology, Water Chemistry, Water and Wastewater Analysis, and Risk Management, Dr. Mollhagen spent his time researching surface and groundwater quality, wetlands ecology, bioassays and index species as expressions of water quality, and the fate of environmental contaminants. Dr. Mollhagen was originally trained as a field biologist.

LLOYD V. URBAN, Professor of Civil Engineering and Director of the Water Resources Center, retired August 31, 2002. During Dr. Urban’s tenure he developed an interdisciplinary graduate course in environmental impact analysis. His research at Texas Tech centered on water resources, environmental engineering, and environmental impact analysis. Also, he has worked on artificial recharge, water conservation, and storm water utilization in arid/semi-arid areas, municipal water resources management, and geologic and hydrologic side characterization. The Civil Engineering Department commends Dr. Urban for his teaching, research, and service activities. While at Texas Tech he was recipient of the Halliburton Teaching Excellence Award for two consecutive years.

C. V. GIRIJA VALLABHAN, retired on May 31, 2002, after 37 years with the department. Through advanced research, teaching and consulting activities, Dr. Vallabhan developed a diversified background in structural and geotechnical engineering. He directed several doctoral and master’s degree students during his tenure. Dr. Vallabhan was heavily involved in research including nonlinear stress analysis, soil-structure interaction problems, and dynamic stress analysis of continuums using numerical methods. He is recognized internationally for his research and has presented technical papers in both national and international conferences. While at Texas Tech University, he received the Halliburton Excellence in Research Award from the College of Engineering.

Faculty Awards & Honors

2005
Priyantha Jayawickrama
♦ Dr. Charles L. Buford Faculty Award, College of Engineering
Chris W. Letchford
♦ Texas Tech University Teaching Academy
♦ President’s Excellence in Teaching Award, Texas Tech University
Phillip T. Nash
♦ Professing Excellence Award, The Success Center and the Department of Housing and Residence Life
Doug Smith
♦ Texas Tech University Teaching Academy

2004
Priyantha Jayawickrama
♦ George T. and Gladys Hanger Abell Faculty Award, College of Engineering
Chris W. Letchford
♦ Outstanding Faculty Award, Mortar Board Senior Honor Society
♦ Outstanding Researcher Award, College of Engineering
Kishor Mehta
♦ National Academy of Engineering
Phillip T. Nash
♦ Professing Excellence Award, The Success Center and the Department of Housing and Residence Life

2003
R. Scott Phelan
♦ Teacher of the Year Award, Civil Engineering
Kenneth Rainwater
♦ Researcher of the Year Award, Texas Tech University Teaching Academy
Sanjaya Senadheera
♦ Texas Tech Alumni Association New Faculty Award

WE’RE ON THE WEB! www.CE.TTU.EDU
♦ Find out the latest information about the CE Department
♦ Contact faculty and staff
♦ Get information about graduate and undergraduate programs
♦ Update your information in the Alumni database

2006 Newsletter

W. Andrew Jackson
♦ Researcher of the Year Award, Civil Engineering
Chris W. Letchford
♦ Tau Beta Pi Outstanding Professor Award, College of Engineering
Kishor Mehta
♦ Barnie E. Rushing, Jr. Faculty, Distinguished Research Award
W. Pennington Vann
♦ Teacher of the Year Award, Civil Engineering
CIVIL ENGINEERING ACADEMY ELECTS NEW MEMBERS

2005
Kenneth L. Bownds, P.E.
BSCE 1986
Glenn Breisch, P.E.
BSCE 1971
Kevin L. Craig, P.E.
BSCE 1985
James R. McDonald, Ph.D., P.E.
Ph. D.1969, Purdue University;
MSCE 1961, Purdue University;
BSPE 1958
Robert W. Pope, P.E.
BSCE 1969
Ravi Vallabhan, M.D.
MD 1988, University of Texas
Health Science Center;
BSCE 1984
Travis G. Waldrip, P.E.
BSCE 1974

2004
Viju J. Abraham, P.E.
MSCE 1995, BSCE 1993
Tony H. Childress, P.E., S.E.
BSCE 1987

2003
Burton Clifton, P.E.
BSCE 1949
David E. Goolsby, P.E.
MSCE 1974, BSCE 1973
Emmett L. Gloyna, P.E.
BSCE 1959
Steven R. Rae, P.E.
MSCE 1972, BSCE 1970
Thomas M. Stroh, P.E.
BSCE 1990

2002
Jeffrey A. Bayer, P.E.
BSCE 1979
Michael E. Cartright, P.E.
BSCE 1976
Joel G. Jelinek, P.E., J.D.
BSCE 1981
Jaynool Khayrattee, P.E.
MSCE 1985,
BSCE 1982, Bombay, India
Dudley G. McFarquhar, Ph.D., P.E.
Ph.D. 1989, MSCE 1986,
BSCE 1984
Richard L. Patrick, P.E.
BSCE 1971

2001
Michael C. Robertson
BSCE 1976
Rathinam P. Selvam, Ph.D., P.E.
Ph.D. 1985

2002
James R. (Bob) Bailey, Ph.D., P.E.
Ph.D. 1989, MSCE 1984,
BSCE 1982
Kent S. Freier, P.E.
BSCE 1978
John P. Ivey, P.E., CFM
BSCE 1963
Max K. Kiesling, Ph.D.
Ph.D. 1995, UC-Berkeley;
MSCE 1991, UT- Austin;
BSCE & BArch 1989
Timothy P. Marshall, P.E.
MSCE 1983,
MS Atmo. Science, 1980;
BS Meteorology, 1978, Northern
Illinois University
Lynn G. Passmore, P.E.
BSCE 1972
Gary C. Thomas, P.E.
BSCE & BArch 1980

Opportunity to Assist CE Department and Programs

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Please designate this gift to Civil Engineering Department

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Graduate Scholarship Fund*
Faculty Development Fund
Cost of Education Fund (unrestricted)
Murdough Center Development Fund

(*Note: If you wish to pledge an annual scholarship in your name or in someone else’s, please contact Dr. Norville)

Please make check payable to Texas Tech Foundation, and mail with this form to:
Dr. Scott Norville, Chair, CE Department, Box 41023, Lubbock, TX 79409-1023

Name ___________________________ Degree(s) & Date __________________
Street ________________________________________________________________
City/Town ___________________________ State _______ Zip ________________
Telephone ___________________________ E-Mail ___________________________
2005 CONCRETE CANOE TEAM MEMBERS

Pictured from left: Kent Riker, Ashley Tunnel, Nancy Gerrish, Jeremie Martinez, Jeff Kendall, Ty Parsons, Jeremy Hunt, Cindy Jones. Back row: Bala Subramanian, Levi Hein, Nick Erwin, Jennifer Shepard, Craig Kenworthy, Pria Mydur

2005-2006 OFFICERS AND ACTIVITIES

In August, new ASCE officers were elected for the 2005-2006 school year. The newly elected students are: Amanda Felderhoff, President, Ray Silva-Reyes, Vice President, Bryan Kinsler, Secretary, and Garrett Yeates, Treasurer.

The student chapter of the American Society of Civil Engineers (ASCE) offers many events for its members. The ASCE student chapter received a Letter of Honorable Mention from ASCE National for its activities and achievements. Additionally, the student chapter won the Merit Award, which identifies it as the highest ranking student chapter in Texas. Students continue to attend both fall and spring Texas Section meetings each year as well as the Concrete Canoe Race. At the Steel Bridge Competition in Austin ('04), the students placed 8th. The 2003 Texas/Mexico regional steel bridge competition took place in Mexico City. Two years of fundraising allowed 24 people to attend. Out of seven competitors, the CE student chapter finished in third place, the best finish in several years. None of the students on this team, led by Shane Walker and Brian Wiese, had completed or were currently taking the steel design class. The students would like to thank Chevron-Texaco for a $1,500 donation that helped defray expenses. A big thank you also goes to Martin Morris, P.E., for accompanying the team and acting as the translator.

ASCE STUDENT CHAPTER AND MEMBERS CONTINUE TO RECEIVE HONORS AND AWARDS

Kent Riker ’04 ... earned second place in the Annual Student Technical Presentation Competition for his report, “Municipal Wastewater Reuse.”
Heather Keister ’04 ... received the Texas Section’s Porter Fellowship in 2002-2003. She received the Hawley Fellowship for 2003-2004. Both programs support graduate students in water research.
Jeff Klement ’04, 2002-2003 President ... won the student presentation contest with his talk on the C-130 field test plans
Cindy Jones ’05 ... received the J. Walter Porter Fellowship.
Shane Walker ’04 ... received the J. Walter Porter Fellowship.

Continued on page 8

ALUMNI NEWS

Joseph E. Minor ’74 received the 2003 Spring Texas Section ASCE Award of Honor. Dr. Minor became the Paul Whitfield Horn Professor in 1984 and was designated a Distinguished Engineer by the College of Engineering in 1989. Dr. Minor was Director of the Institute for Disaster Research at Texas Tech for 18 years.
Russell Thoma, Jr. ’80 was honored as Engineer of the Year by the South Plains Chapter of the Texas Society of Professional Engineers, February 2002.
Gary Thomas ’80, recipient of the 2005 Spring Texas Section ASCE Government Civil Engineer Award. Gary is president/executive director of Dallas Area Rapid Transit (DART).
Mari Garza-Bird ’98, has been elected Vice-President to AWWA. Mari is Principal Engineer for CDM Inc. in San Antonio, TX.

DISTINGUISHED ENGINEERS ALUMNI AWARD

Douglas E. Barnhart ’69, received the College of Engineering Distinguished Engineers Award in 2002. Mr. Barnhart established and operates his own full service building, engineering and construction management firm, Douglas E. Barnhart, Inc. Mr. Barnhart performs numerous professional and community service activities. He is a member of the Civil Engineering Academy.

J. Gregory Boyd ’76, received the College of Engineering Distinguished Engineers Award in 2005. Mr. Boyd is the president of Jones and Boyd, Inc., a firm providing civil engineering, planning, landscape architecture and surveying services. He is a member of Texas Tech’s Academy of Civil Engineering and former chairman of the Civil Engineering Advisory Council.
MORE ASCE Student Chapter News

ASCE Student Members Involved in Community
Community service has included Habitat for Humanity work and providing Christmas gifts for children at the Lubbock Children’s Home. The Department of Civil Engineering is involved with Dunbar Junior High School Science and Math Academy Members in Lubbock for the Future Cities Competition (faculty advisor is Dr. Chris Letchford). In the past year, ASCE student members began mentoring junior high students. The competition runs nationally with regional runoffs and involves teams of junior high students (grades 7 & 8). Using SimCity 2000 software, the junior high students build a city and then construct a scale model of a portion of their city.

Thank You CE Academy
In the summer of 2002, ASCE National held a one-and-only national student conference in Madison, Wisconsin. With the generous support of the CE Academy, three students, Brian Wiese, Jonathan Marchese and Brandon Luedke attended. We would like to thank the Academy for its support.

Where Are You Now?

Name __________________________________________________________________________________
Degree(s) _______ Year(s) __________ Institution(s) ____________________________________________
Contact Information (optional)  _____________________________________________________________
_______________________________________________________________________________________

Alumni: We want to hear your news!
E-mail [info.ce@ttu.edu] us with your recent promotions, honors, publications, research, photos, new additions to family, so we can keep your classmates informed about changes in your life.

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