Department of
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Colorado State University

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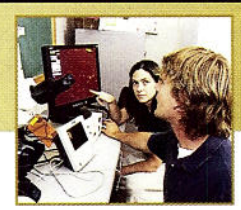
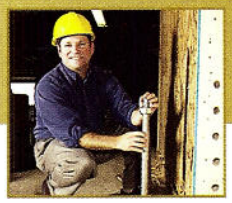

New Scholarships

The department is pleased to announce two new undergraduate student scholarships. The corporate sponsors are: TST, Inc. and S. A. Miro, Inc. TST, Inc., Consulting Engineers of Fort Collins offer consulting for civil engineering, master planning, land development, municipal infrastructure, environmental engineering, water and waste water, and surveying projects. S. A. Miro, Inc. is one of the premier consulting firms in the western United States. From their offices in Colorado, they offer preeminent design services to major clients across the United States for civil engineering, structural engineering, and retail architecture.

Transportation Research on a Roll

Professor Richard Gutkowski, Colorado State's representative on the Mountain-Plains Consortium (MPC) executive committee, reports that the MPC has successfully competed to be redesignated as the University Transportation Center for Region VIII. The MPC is a national resource and focal point for the support of research and training concerning the transportation infrastructure and the movement of passengers and freight. The MPC is one of eleven University Transportation Centers sponsored by the U.S. Department of Transportation. The Mountain Plains Consortium's designation as the center for Region VIII comes with an increase in funding from $1 million to $2 million per year. Colorado State University, North Dakota State University, South Dakota State University, the University of Utah, and the University of Wyoming collaborate in the consortium. The grant extends this collaborative program to 2009.

Unprecedented Test of a Wood Frame Building

On November 14, 2006, Colorado State Associate Professor John van de Lindt and a group of colleagues watched with excitement as a two-story California-style town house shook furiously from side to side and up and down for 15 seconds. In the Structural Engineering and Earthquake Simulation Laboratory at the State University of New York (SUNY) at Buffalo, the engineers were witnessing the effects that an earthquake similar to the magnitude 6.7 Northridge quake that hit Los Angeles in 1994 would have on a wood frame house located approximately 5 miles (8 km) from the quake's epicenter.

The three bedroom, two-bath, 1,800-square-foot town house is the largest wood frame building ever to be subjected to seismic testing on a shake table. More than 250 sensors—accelerometers, displacement transducers, and load cells—along with 12 video cameras placed throughout the structure recorded the impact of the simulated earthquake on the building and its contents. For the test, a car was parked in the house's garage and dishes were left on the dining room table.

When the simulated quake was over, the house had clearly suffered. Walls were cracked, ceilings sagged, chunks of stucco lay on the ground.

"The entire structure was permanently displaced by a couple of inches and now leans over at approximately 1 in. (25 mm) per story," says van de Lindt. But the fact that the structure did not collapse—the windows did not even break—"really says a lot for wood frame construction even as we do it now," he adds.

Dr. van de Lindt, the project leader, and his associates will continue to analyze the results of the test over the next several months and are excited about what the experiment will tell them about the responses of wood frame buildings to seismic events. Despite the fact that wood frame construction accounts for an estimated 80-90 percent of all structures in the United States and 99 percent of all residences in California, engineers have not studied the impacts of earthquakes on wooden structures, especially houses and low-rise buildings, as extensively as they have high-rise buildings constructed of steel and concrete. The November 14 test represents a huge step forward in understanding how wood frame buildings react to seismic stress.

The simulation is part of a $1.24 million, four-year international project called NEESWood, which involves five universities and is funded by the National Science Foundation's George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES).

For more information on the NEESWood research, visit the website: www.engr.colostate.edu/NEESWood.

The test house in mid-construction at the Structural Engineering and Earthquake Lab at SUNY, Buffalo.

Alumni News

Harold H. Short, B.S. 1940 Civil, passed away on March 26, 2007. For more on Short please see the memorial article on page 6.

Keith Lautenbach, B.S. 1950 Civil, stopped by the Colorado State University Engineering exhibit at the Western Stock Show with his family—great grandson Aiden, grandson Brian, and daughter Barbara Lautenbach *(shown at right)*. Now retired, after 35 years as a highway engineer with the Federal Highway Administration, Keith says that he is enjoying making trips to great engineering projects around the world. Over the past three years, he has walked across the Brooklyn Bridge, taken a tram ride through the new bridge and tunnel crossing between Copenhagen, Denmark, and Malmo, Sweden, and traveled through the Channel Tunnel connecting England and France. In March, Keith will be sailing through the Panama Canal.

Ben McCall, B.S. 1956 Civil, lives in Redondo Beach, California. Prior to retirement, McCall had a long career in the aeronautics industry and worked on the development of the C-17.

Alumni Focus: Eric Wilkinson

Eric Wilkinson, B.S. 1973 Civil Engineering, received the 2007 College of Engineering Honor Alumnus Award at the University's Distinguished Alumni Awards and Recognition Banquet on February 10, 2007. The awards program recognizes CSU alumni who have distinguished themselves professionally, brought honor to the University, and made significant contributions of time and/or philanthropy to the University or their community. Eric is general manager of the Northern Colorado Water Conservancy District (NCWCD) and has been a superior leader in the field of water conservation and management, and a tireless proponent of water conservation efforts throughout the state of Colorado.

During Wilkinson's 33-year career, he was employed by the Colorado State Division of Water Resources for 11 years and by the city of Greeley for three years. He has been with the NCWCD for 19 years and was appointed General Manager in 1994. Wilkinson has expertly guided the District through a number of formidable challenges including a prolonged drought, litigation, a major Safety of Dams modernization, and a number of infrastructure projects.

At the same time, Eric has found time to present lectures to CSU engineering students and has consulted with CSU Cooperative Extension to develop class curriculum. Wilkinson is a member of numerous committees and boards, including the Colorado Water Congress, the Platte River Project, Colorado River Advisory Council, Colorado Water Conservation Board, the West Foundation, South Platte Water Related Activities Project, and South Platte Basin Roundtable Interbasin Compact Committee. In March of 2000, the governor of Colorado appointed Wilkinson the South Platte Basin representative on the Colorado Water Conservation Board.

In 1999, Wilkinson was the recipient of the Colorado State University College of Engineering Public Service Award. In 2004, he won the General Palmer Award, given annually to the outstanding engineer in industry, from the American Council of Engineering Companies of Colorado.

Kathy MacKay, member of the CSU Alumni Association Board of Directors presents Eric Wilkinson with this prestigious award.

John Allen Cape, B.S. 1957 Civil, passed away November 25, 2006. John worked with the California State Water Project prior to attending McGeorge School of Law. He retired as assistant chief counsel for DWR in 1987.

In January, Professor **Tissa Illangasekare**, Ph.D. 1968 Civil, of the Colorado School of Mines, was named a Fellow of the American Association for the Advancement of Science (AAAS) for 2006. He was among 449 members elected for their scientifically or socially distinguished efforts to advance science or its applications. AAAS is considered the world's largest federation of scientists.

David Frazier, B.S. 1972 Civil, vice president, Merrick & Company was elected president of the Colorado Chapter of American Public Works Association (APWA). His company recently received two awards from the American Council of Engineering Companies of Colorado.

Mark R. Haynes, B.S. 1973 Civil, gave a presentation on January 11, 2007, for the Northern Colorado branch of the ASCE, of the revised Dam Safety Regulations that were scheduled to go into effect early this year. Mark is chief of the Safety of Dams Program for the State Engineer's office and the Colorado Division of Water Resources.

President of Synergetics, Inc., **Rajiv Mehta**, M.S. 1974 Civil, received the 2006 U.S. Department of Agriculture Group Honor Award on behalf of his company.

Gary Thomas, B.S. 1974 Civil, was promoted to president of Martin/Martin, Inc. In addition, his company received an award for structural engineering design from the American Council of Engineering Companies of Colorado.

On August 10, 2006, **Kenneth A. Lovelace**, M.S. 1980 Civil, passed away. Ken worked for the Alyeska Pipeline Service Company in Anchorage, Alaska. From 1989-1991 he served in the Peace Corps in Morocco.

Thomas Anzia, B.S. 1981 Civil, reports to us that **Colleen Henderson**, B.S. 2002 Civil and Mathematics, is currently a traffic engineer with Felsburg Holt & Ullevig in Colorado Springs.

Robert C. Tedrick, B.S. 1983 and M.S. 1986 Civil, is with the Corps of Engineers, Pacific Ocean Division in the Alaska District. He is currently doing marine concrete specification.

Kumaraswamy "Kumar" Sivakumaran, Ph.D. 1989 Civil, received the Kaufman Award for 2004 and 2005 for the State of West Virginia. The Kaufman Award is awarded annually to the individual attorney who has done the most pro bono work for civil legal

services for low income citizens. Kumar donated over 520 pro bono hours during the past four years and has worked on many complicated domestic relations cases.

Nathan A. Dowden, M.S. 1995 Civil, was recently appointed a principal at RMG Engineers in Colorado Springs, Colorado.

Having given up life as a bureaucrat at the New Hampshire Department of Environmental Services, **Henry Kunhardt**, M.S. 1995 Civil, is happy to be back in the private sector at Sandford Survey and Engineering, Inc., in Bedford, New Hampshire.

Dana Moore Miller, B.S. 1995 Civil, is one of the founding engineers of a new firm in Buena Vista, Colorado: E&C Services. With strengths in water resources, dams, and construction, E&C Services provides civil engineering services to the upper Arkansas Valley and water resources and construction consulting nationally and internationally.

Christopher M. Safford, B.S. 2002 Civil, is working with AMEC, Earth & Environmental as a water resources engineer. He passed the PE exam in October 2006.

Kim Fentress, B.S. 2003 Civil, now lives in Johnstown with her husband Bryce and their two children, Cael (three) and Logan (two months). Kim started working at Colorado Precast Concrete in Loveland in November, 2003, as a structural engineer and estimator. Kim loves her job and feels she has gained a lot of valuable experience being at a manufacturing plant. "I have definitely put Dr. Criswell's concrete class to use!" Kim says.

Since graduation, **Ryan Laird**, B.S. 2003 Civil, has worked at three different geotechnical firms as he has accompanied his wife to Yale and Stanford for her research. He worked in Connecticut for a year-and-a-half, the San Francisco bay area for a year-and-a-half, and is now back in Colorado working at URS in Denver.

Emily Magnuson Skalsky, B.S. 2003 Civil, recently accepted a position with GMS, Inc. (Meyer & Sams, Inc., dba GMS, Inc.), a consulting engineering firm specializing in public works and utilities. Her job will include work in such areas as water resource development, water transmission, water distribution, water storage, wastewater collection, water and wastewater treatment, storm water management, municipal/district engineering, and municipal financial planning.

Ryan Meisel, B.S. 2004 Civil, has returned to Fort Collins and is a project engineer for Stantec Consulting.

Travis Burgers, M.S. 2005 Civil, was named the Mountain-Plains Consortium (MPC) Student of the Year for 2006. Travis, received the award at the Annual Meeting of the Transportation Research Board in Washington D.C. alongside students selected for similar awards by the other University Transportation Centers sponsored by the U.S. Department of Transportation. During his time at Colorado State, Burgers held a dual appointment as a graduate teaching assistant and a graduate research assistant and worked on an innovative method for timber bridges adapted from an aerospace industry process termed "Z-spiking" used in making laminated composites. His study consisted of applying Z-spikes (fiberglass reinforced polymer rods) to damaged stringer members. He conducted extensive laboratory tests of a full-scale chord of an open-deck timber trestle railroad bridge that had been reinforced by Z-spiking. The successful work was also presented at the 2006 International Association for Bridge and Structural Engineering held in Budapest, Hungary, and published in the proceedings. Presently, Travis is a doctoral student in biomechanics at the University of Wisconsin-Madison conducting research on press-fit fixation and visco-elastic response of a bone-implant interface. This technology will contribute to improved understanding and treatment of osteoarthritis of the knee. In his future career, he hopes to apply such studies to other medical conditions, physical trauma, and bone injuries.

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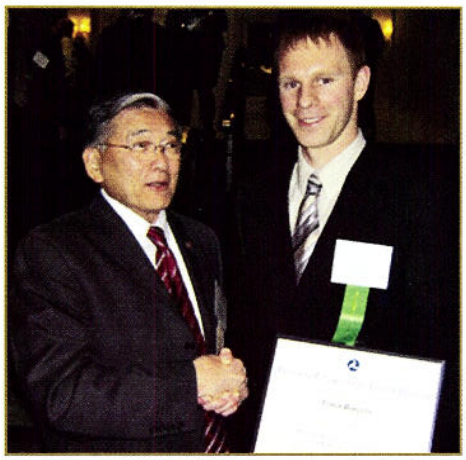
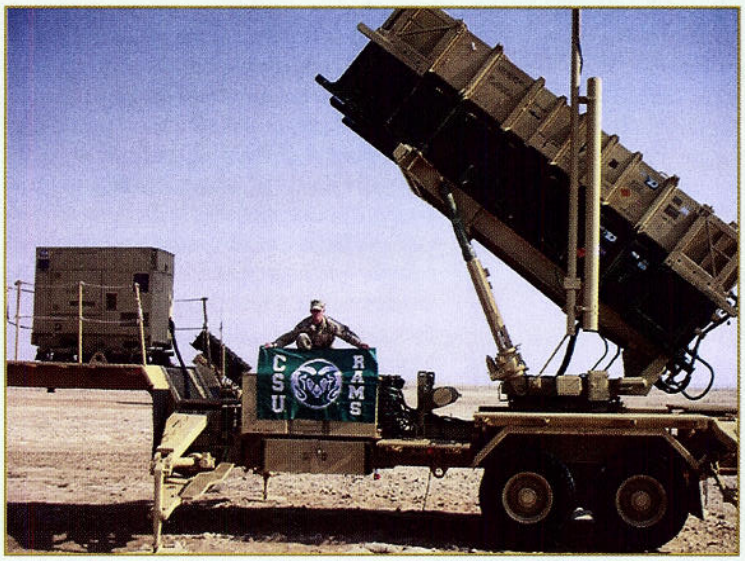


Former Secretary of Transportation Norman Mineta congratulates Travis on his MPC Student of the Year award.

Alumni News from the Air Force



Second Lieutenant **Jonathan "Champ" Herman**, B.S. 2005 Environmental Engineering, proudly displays his Colorado State colors on the job. Herman works in the Air Force's Expeditionary Civil Engineer Squadron of the 379th Air Expeditionary Wing as the base development engineer, programmer and real property manager.

He writes that he is currently deployed to "an undisclosed location in Southwest Asia." Lieutenant **Shane Clark**, B.S. 2004 Civil, sent Herman the CSU flag from Davis-Monthan Air Force Base in Arizona where he works as a navigator aboard a C-130. Other alums in the Air Force include **Coy Egbert**, B.S. 2005 Civil, who is now a captain stationed at Peterson Air Force Base as a pilot, and **Nina Choy**, B.S. 2002 Civil, who is also a captain working at McConnell Air Force Base in Kansas. Herman writes, "Thank you to CSU for providing me with the skills I use on a daily basis. I truly believe that CSU has left me leaps and bounds beyond my peers in job knowledge and preparation. GO RAMS!"

Faculty News

Dr. Bogusz Bienkiewicz and Ph.D. student **Munehito Endo** traveled to Japan during the summer of 2006 to participate in two technical conferences. First, they attended the Fourth International Symposium on Computational Wind Engineering, held in Yokohama, July 16-19, 2006. Dr. Bienkiewicz presented their paper entitled "CFD-Aided Wind-Tunnel Investigation of Pedestrian Wind." As a member of the CWE2006 Advisory Committee, Dr. Bienkiewicz participated in a number of meetings and chaired plenary and breakout sessions held during the conference. In addition to Bienkiewicz and Endo, CSU was represented by **Professor Robert Meroney,** who presented a technical paper, chaired a number of sessions, and served on the Advisory Committee.

Subsequently, Bienkiewicz and Endo traveled to Tsukuba City, Japan, where they participated in the 4th US-Japan Workshop on Wind Engineering, July 20-22, 2006. This workshop was jointly sponsored by the Task Committee D (Wind Engineering) of the U.S. Japan Cooperative Program on Natural Resources (UJNR). During this meeting Dr. Bienkiewicz presented a paper entitled "Wind Losses and Mitigation Initiatives in the U.S. and in Japan, and Prospects for Coordinated Collaborative Wind Engineering Research," co-authored by Bienkiewicz and Endo.

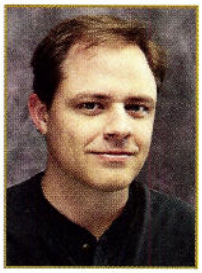
Professors Bienkiewicz and Kato (of University of Tokyo) introduce keynote speakers during one of the plenary sessions held during CWE2006. ***(Photo courtesy of CWE2006 staff)***

Dr. Neil Grigg's paper "Workforce Development and Knowledge Management in Water Utilities" was selected for the 2007 AWWA Management Division Best Paper Award.

Dr. Richard Gutkowski presented the technical paper "Shear Spike Repair of Timber Railroad Bridge Chord Members" at the conference, Responding to Tomorrow's Challenges in Structural Engineering, held in September in Budapest, Hungary. Also, Dr. Gutkowski is serving on a steering committee organized by the North Front Range Metropolitan Organization working on a regional ballot issue aimed at approving a Regional Transportation Authority for northern Colorado. He serves on the overall committee and on the Project Selection sub-committee that will define transportation projects to be included on the ballot.

Professor John Nelson will be retiring this semester after a notable career in education during which he has made significant contributions to the understanding of expansive soils, mine waste management, and extra-terrestrial geotechnics. An alumnus of the Illinois Institute of Technology, Nelson has been a Colorado State faculty member since 1973. At CSU, he has been the recipient of numerous awards, developed the geotechnical engineering program, and served as head of the Department of Civil Engineering from 1986 to 1991. In 2001, he was named a Hometown Hero by the *Fort Collins Coloradoan* for organizing Tailings and Mine Waste conferences. In retirement, Nelson looks forward to pursuing his hobby of raising Texas longhorns.

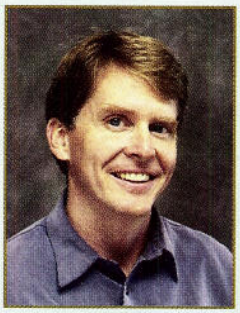
Dr. Jeffrey Niemann has been invited to give a talk on soil moisture estimation and modeling at the European Geophysical Union annual meeting in Vienna. He was also invited to talk at the University of Colorado, Boulder on long-term watershed erosion.



Professor Terry Podmore spent March 2007 in Angola and Zimbabwe. In Angola, he was part of a team from Engineering Ministries International (eMi). The team worked with Youth for Christ in Angola to develop a master plan for a youth ministry center. Dr. Podmore developed a plan to reactivate the abandoned farm that has been acquired as the site for the program. The farm will support the center with vegetables and provide income through sales at local markets. Agricultural education will also be a component of the plan. In Zimbabwe, Dr. Podmore investigated potential water projects in conjunction with local Rotary Clubs. One project currently underway is to provide reliable water supplies for AIDS orphanages in Marondera, a town about 60 miles from the capital, Harare. Other projects in Zimbabwe will provide water for a small township and a school.

Water experts converged on Fort Collins to participate in the 27th Annual Hydrology Days. **Dr. Jorge Ramírez** presided over the event. Ramírez welcomed special guest

Faculty Member Receives Fulbright Award



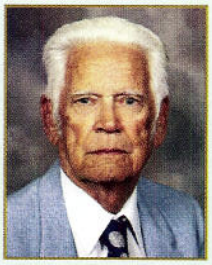
Brian Bledsoe, assistant professor of civil and environmental engineering, has been awarded a Fulbright Award to organize a river seminar and research program at the Universidad de Concepcion in Chile from March to July 2008. Bledsoe's river seminar will bring together aquatic ecologists, physical scientists, and engineers, and will be integrated with a concurrent research program that focuses on the communal development of a classification of rivers for improved understanding of how hydrologic/geomorphic processes and human influences are linked to river biodiversity in Central-Southern Chile. The seminar will emphasize critical analysis of recent scientific literature and U.S. river assessment programs, sharing and developing tools for characterizing multi-scale physical habitat, monitoring and data needs, and interdisciplinary synthesis.

The Fulbright program, established in 1946 and sponsored by the U.S. Department of State, was created to promote mutual understanding between the people of the United States and people around the world. Fulbright Scholars are chosen for leadership in their areas of expertise. In receiving this award, Bledsoe will join the ranks of some 273,500 alumni of the Fulbright program, alumni who have gone on to become heads of state, judges, ambassadors, cabinet ministers, CEOs, university presidents, and Nobel Prizes winners.

Emeritus Faculty News

Art Corey Named Fellow of Soil Science Society of America

by Emily Wilmsen



Arthur T. Corey, emeritus professor at Colorado State University, has been named a Fellow of the Soil Science Society of America—a prestigious honor bestowed each year on a small percentage of the organization's 6,000 members.

Corey received the honor this fall at the organization's annual meeting held in conjunction with the American Society of Agronomy and Crop Science Society of America in Indianapolis, Ind. He is one of 14 Fellows named in 2006.

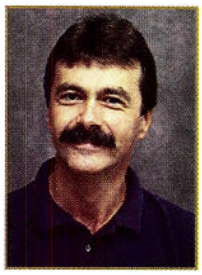
"Art Corey is an extraordinary individual," said Sandra Woods, dean of the College of Engineering at Colorado State. "He was responsible for much of the earliest groundwater research and his contributions helped determine the development of the groundwater discipline."

Corey worked as a civil engineer at Colorado State from 1956 to 1958 before becoming a founding member of the Asian Institute of Technology in Thailand. He returned to Colorado State in 1962 as a professor of Agricultural Engineering and served there until 1977. After stints at universities in Oregon, Sri Lanka, Ireland, Michigan and Alabama, he returned to Colorado State in 1994 as a faculty affiliate and professor emeritus.

Corey obtained his master's degree at Colorado State (then Colorado A&M) and his doctoral degree at Rutgers University. He began his professional career as a physicist in the petroleum industry. His research and teaching at Colorado State was in the fields of multi-phase flow in soils and porous rocks, ground water hydraulics, irrigation, agricultural drainage and engineering mechanics.

Robert Meroney's World Lecture Tour

Dr. Robert Meroney, professor emeritus, presented an invited paper at the Second Fire Behavior and Fuels Conference, March 26-30, 2007 at Destin, Florida titled "Wind and Urban Interface Meteorology." On April 11, 12, and 13th he presented a three-day workshop on computational wind engineering for the civil engineering department at Tamkang University, Taiwan. Over July 1-6, 2007, Dr. Meroney will attend the 12th International Conference on Wind Engineering, Cairns, Australia, and present a paper titled "Numerical Prediction of Fire Propagation in Idealized Wildland and Urban Canopies." In August, he is scheduled to present a paper titled "CFD, Full Scale and Physical Model Prediction of Dispersion in an Urban Environment" at the PHYSMOD 2007 conference in Orleans, France.



lecturers Professor J-Y Parlange of Cornell University, Professor Thomas Dunne of the University of California, Santa Barbara, and Professor Murugesu Sivapalan of the University of Illinois, Urbana-Champaign.

Dr. Larry Roesner has received an $800,000 grant from the Water Environment Research Foundation to evaluate whether metropolitan water districts in Denver, Los Angeles and Philadelphia are effectively protecting their water supplies from stormwater pollutants.

Dr. Ted Yang was recently recognized by the American Academy of Water Resources Engineers Board of Trustees as having met the requirements for the Diplomate, Water Resources Engineer (D.WRE) credential. The Bureau of Reclamation just published a new book, *Erosion and Sedimentation Manual,* in November, 2006. **Dr. Yang** authored or coauthored five of the book's nine chapters.

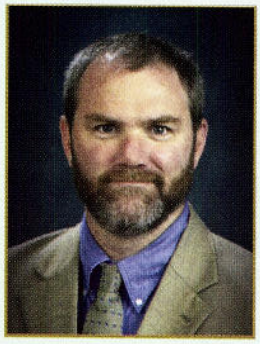
Sunada Retires, Leaving Legacy to Students

Professor Dan Sunada retired this spring after forty-two years at Colorado State. An alumnus of the University of California at Berkeley, Sunada joined Colorado State's faculty in 1965. He is an internationally recognized expert on groundwater and drainage and has been the recipient of numerous teaching awards.

Over the years, Sunada has touched the lives of many and has been singled out many times for his excellence in teaching. The Dan and Kris Sunada scholarship, which was endowed last year, will provide a lasting symbol of Dr. Sunada's commitment to students and education.

On April 4, 2007, Sunada's retirement reception was attended by over 120 people, including students, current and emeritus faculty, Colorado State administrators, and Sunada's family. At the reception, Dan said the he hopes to spend more time on the tennis court.

Physical Models Provide Clues to Hydraulic Problems



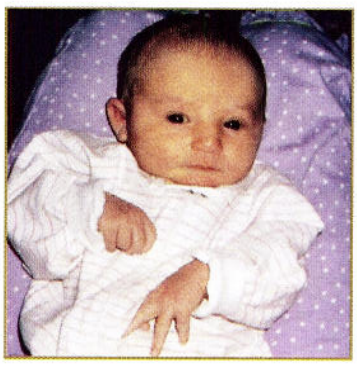
By taking just a few steps, Christopher I. Thornton, director of Colorado State's Hydraulic Research Laboratory, can move from examining sediment excluding structures at a hydropower project located on the Chenab River in India to studying spawning conditions for white sturgeon near Libby Dam on the Kootenai River in Montana. Thornton, his colleagues, and hydraulics students have constructed scale models of these two areas and many others at the Hydraulic Research Laboratory, a world-class facility with space enough to accommodate large models and with powerful flows provided by water from the nearby Horsetooth Reservoir. Physical models play an essential role in examining complex hydraulic problems that are difficult to describe numerically.

In the case of the hydropower project in India, Thornton and his co-PI Michael Robeson constructed a 1:50 Froude scale model comprised of a headbox with inlet manifold and diffuser, downstream tailwater control, power intake structure, spillway portion of the Baglihar Dam, and proposed sediment ejector. Model flow capabilities ranged from approximately 1.5 to 8 cubic feet per second (750 cms to 4000 cms prototype) enabling a range of discharges. Modeling the area in such a way permitted a scale sufficient to model the actual transport of sediment. While the actual quantities of sediment deposited were not examined, trends in deposition and erosion could be quantified and compared with individual design options.

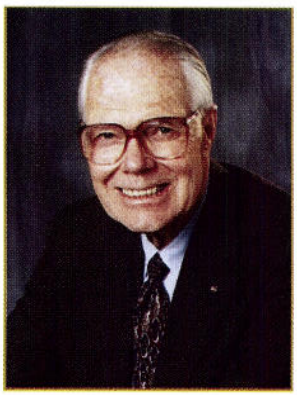
New to the Civil and Environmental Engineering Family!

Dr. Amy Pruden-Bagchi and Rajesh Bagchi welcomed their first child, Ryan Chandra Bagchi, on December 14th.

On January 17, **John van de Lindt**, his wife Carol, and sons, Ian and Zachary, welcomed baby Jayne Camille into their family.



In Memoriam: Harold H. Short



We are saddened to report the passing of Colorado State engineering alumnus and noted benefactor Harold Short of Boulder on March 26, 2007. He married Betty Gay Hamnett in 1939. Short graduated in 1940 from Colorado State with a bachelor's degree in civil engineering. As a student, he was active in ROTC, and Phi Kappa Tau fraternity. He served as vice-president of student body, and was honored as a Pacemaker.

Following graduation, Harold Short worked briefly for the state of Wyoming, but his work was soon interrupted by World War II. He was commissioned in the 6th Infantry, 51st Field Artillery, and in 1941 he was called to active duty. Short served five years in the U.S. Army, earned the rank of Lieutenant Colonel and received two Bronze Stars and the Purple Heart.

After the war, Short worked in the construction industry as project manager for Peter Kiewit Sons' Inc. In 1953, Short's aspiration to go into business for himself led to a partnership in Milne Ready Mixed Concrete Inc. in Boulder with James G. Milne. Under Short's management, the company evolved from a small sand and gravel outfit into Flatiron Companies which included paving, concrete, sand and gravel, and development businesses. Most prominent of their projects was building many of the Glenwood Canyon bridges.

Short and his family have a long history of contributing their time and money to their community. Their generous contributions to Colorado State include the establishment of endowed scholarships in three colleges and land contributions. They made the first major gift to launch the Morgan Library campaign. In 1997, the Shorts made an unprecedented $2 million gift to the engineering and physics campaign. The gift helped to fund the expansion and renovation of the Engineering Building, to create the Harold H. Short Civil Infrastructure Systems Laboratory, and to establish the Infrastructure Chair in the College of Engineering. Professor Larry Roesner says of this gift, "Without Harold Short's endowment, I would not have had the opportunity to develop all the good applied research projects that we have produced in the Urban Water Center (www.engr.colostate.edu/HHSLab/index.htm) or teach the courses in applied engineering that have benefited so many students."

Harold Short will be missed by all those who knew his generous spirit. The department offers condolences to Mr. Short's family. Harold Short is survived by his second wife, Charlotte York Irey Short, and his three children, Kay McDowell, Carol Patten, and Jim Short, and their families.

Senior environmental engineering major **Christina Dodson** received the Riverside Technology Scholarship. Riverside specializes in water resources engineering and consulting.

Erin Dallinger and **Joseph Rasmussen** received Robert Longenbaugh Scholarships. Bob Longenbaugh is a 1957 and 1962 agricultural engineering alumni.

Maria Gibbons, a junior environmental engineering student, and **Jose Seda,** a civil engineering senior, were recipients of the Dr. Omnia El-Hakim Diversity Scholarship.

Ph.D. student **Christine Rohrer** was awarded a contract with Urban Drainage and Flood Control valued at $100,000 to link urban best management practice scenarios to the whole life cost of the facilities. This study will be run out of the Harold H. Short Urban Water Center.

Rae Rossetti and **Lauren Walker**, both civil engineering majors, were recipients of the ARCS (Achievement Rewards for College Scientists) Scholarship.

Seema Shah, Ph.D. student, announced she was married last semester. Her name is now officially Seema C. Shah-Fairbank.

Chris Turnball-Grimes, received the Dan and Kris Sunada Scholarship. Chris was a keynote speaker at the Annual College of Engineering Scholarship Luncheon. The Sunada Scholarship benefits civil engineering undergraduate students.

Fall 2006 Commencement

Front row (left to right): Amanda Smeeding (ENV), Robert Case (CE), Alex Richards (CE), Melyssa Whaley (CE), Elizabeth Bekhit (CE). **Second row:** Devon Horntvedt (ENV), Mark Valentine (CE), Scott Friend (CE), Brianna Forrest (ENV), Justin Withee (CE), Laurie Clark (CE). **Back row:** Professor Neil Grigg, Professor and Interim Department Head Luis Garcia, Assistant Professor Chris Thornton, and Advisor Laurie Alburn.

Record Turnout for Engineering Career and Internship Fair

On February 20, 2007, 107 companies and agencies across the United States packed the Lory Student Center for the College of Engineering Career and Internship Fair, with a number of companies pushed to a waiting list due to limited space. The annual event also drew a record student turnout, with almost 750 undergraduate and graduate students attending.

"We are extremely pleased with the success of this year's event," said John Haines, engineering career liaison. "I think the response to our fair is indicative of the current economic climate. Seventy-seven of the 107 companies were recruiting civil and environmental engineers.

Tetra Tech representatives, Roslyn Stern, B.S. 1994 and M.S. 1997, Civil , and a coworker enjoy the Career Fair.

There is a tremendous demand right now for civil and environmental talent and I believe that trend will continue."

The fair gave students an opportunity to learn about many different companies and industries and explore various career paths. Likewise, company representatives were able to visit with potential employees and interns and schedule follow-up interviews with promising candidates.

Erica Spencer, B.S. 2004 Civil Engineering and Mathematics, of Huitt-Zollars visits with a student.

Because of the overwhelming response to the 2007 fair, the college will be holding a two-day Career and Internship Fair in 2008 to accommodate the increased demand from employers.

Watch the College of Engineering website for details (www.engr.colostate.edu) or contact John Haines at 970-491-0716 or john.haines@colostate.edu for additional information about the 2008 Career and Internship Fair.

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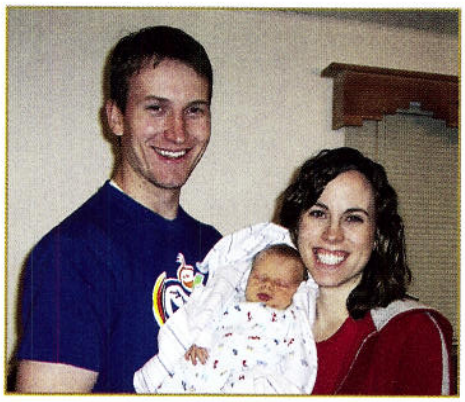
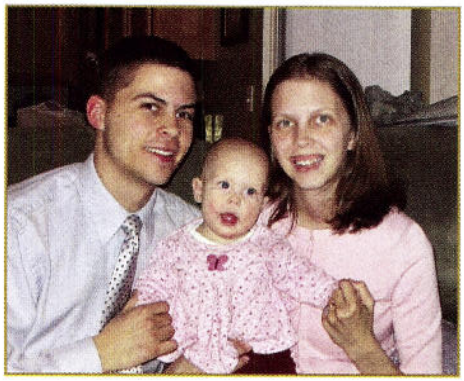


Jeff Goodell, B.S. 2005 Civil, and his wife Tammy announced the birth of their son, Caden. Jeff represented Martin/Martin, Inc. at the college's Career and Internship Fair on February 20, 2007.

Karol Miodonski, B.S. 2005 Civil, and his wife, Calista, B.S. 2005 Human Development and Family Studies, welcomed daughter



Emilia Marya into their family on August 17, 2006. Karol is in the civil group at PBS&J in the Denver Tech Center where he primarily works on design projects for the United States Army Corps of Engineers. Presently, he is working on the design and site development for a design/build project at Fort Carson in Colorado Springs, Colorado.

Amy Jo Fields, B.S. 2006 Civil, was selected as the 52nd First Lady of Rodeo in Colorado and "ruled" over the events of the National Western Stock Show. Following an intense four-day competition, Amy Jo emerged from a field of seven finalists to win the title of

Miss Rodeo Colorado 2007. In addition to capturing the coveted title, Amy Jo also won the categories of photogenics, horsemanship, and appearance. Amy Jo would like to pursue a master's degree in construction or business management. Currently, she works in rodeo administration for the Professional Rodeo Cowboys Association where she assists with the planning of special events and contestant correspondence.

Luke D. Gingerich, B.S. 2006 Civil, began 27 months of service with the U.S. Peace Corps in February working as a water and sanitation engineer in Honduras. His wife, Annie, M.A. 2006 Spanish Literature and English, will also be serving as a health educator in Honduras. While climbing Long's Peak this summer, Luke found a surveying bench mark that read "Colorado State A&M College B.M., Engineering Students 1898-1901, 13,749 ft. above sea level."

Andres Jaramillo, M.S. 2006 Civil, is working on point-of-use analysis for a city council in Christchurch, New Zealand.

Stephanie Pinon, M.S. 2006 Civil, was recently awarded a patent.

New Alumni and Friends Website

Are you curious about a former classmate? Look them up on the new Civil and Environmental Engineering Alumni and Friends website: www.engr.colostate.edu/ce/alumni.shtml. News from alumni are arranged according to graduation year.

Contact Linda Hinshaw at Linda.Hinshaw@Colostate.Edu to send us your own news.

Alumni Focus: Darell Zimbelman

Darell Zimbelman B.S. 1964 and M.S. 1966 Civil Engineering, has spent most of his career managing water in the familiar landscape of northern Colorado. Born in Fort Lupton, Zimbelman grew up in the Prospect Valley and Brighton, Colorado. At Colorado State, Zimbelman jokes that he might have been an electrical engineer were it not for a vacancy on the civil engineering intramural football team that convinced him to change his major.

Upon graduation, Zimbelman served in the U.S. Army in Vietnam, where he was awarded both the Army Commendation Medal for Achievement and the Bronze Star. After his time in the army, he worked on a variety of water management issues in the United States and around the world, and in 1981, he obtained a Ph.D. in industrial and management engineering from Arizona State University.

Finally, Zimbelman returned to his home state in the 1980s to take a job as the supervisor of hydrologic engineering at Stone and Webster in Denver, and in 1983, he began his long and notable career with the Northern Colorado Water Conservancy District (NCWCD), a public agency that provides water for agricultural, municipal, domestic, and industrial uses in a 1.6 million acre area in northeastern Colorado. Highlights of Zimbelman's twenty-three year career with NCWCD include refinancing of the D bonds for the Windy Gap project in 1986, overseeing the design and construction of the nearly 100 miles of pipeline that make up the Southern Water Supply Project, and acting as project manager for the construction of the District's new 35-acre office complex.

On his retirement from his position as the District's associate general manager, Zimbelman credits part of his success to his Colorado State education. He particularly remembers how Dr. Fead inspired him to get involved in ASCE by demonstrating that participating in professional activities was an essential part of being an engineer. "I had great admiration for all my professors at CSU, including Max Parshall, Herb Schweizer, Jack Cermak, Bob Hayman, and Jim Goodman. E.V. Richardson and Daryl Simons were my water resources engineering mentors and provided a standard of excellence that I tried to emulate," Zimbelman says. He also fondly remembers his classmates, including Jim Ruff, Tom Norton, Ron Thaemert, and Jon Peterka. Moreover, Zimbelman met his wife Suzanne at the University. Now he looks forward to spending more time with her, his two sons, and his six, soon to be seven, grandchildren.

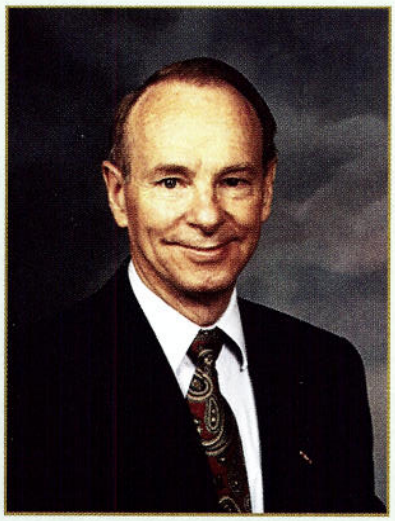


Photo courtesy of NCWCD