

### Tom Bradley Joins the ME Faculty

As of August 2008, Tom Bradley has become the latest member of Colorado State's mechanical engineering faculty. Bradley comes to us from Georgia Tech, where he just finished his Ph.D. with a dissertation entitled "Modeling, Design, and Energy Management of Fuel Cell Systems for Aircraft."

He has worked on alternative energy systems beginning with his undergraduate work at the University of California–Davis, where he worked on a Chevy Suburban conversion to a plug-in hybrid electric vehicle (PHEV) for the 2001 SAE National Future Truck Competition.

During his master's degree studies, completed in March 2003 at Cal

Davis, he worked on continuously variable transmission (CVT) design and fabrication. His master's thesis dealt with the dynamic simulation of such transmissions for purposes of design.

Bradley has not only studied and applied these advanced energy conversion topics in academe but also has applied them in the real world. He provided analysis and design input for the Electric Power Research Institute (EPRI) dealing with PHEVs and he helped Ford with simulation, control system design, and fuel economy analyses for the prototype of the Ford Escape Hybrid.

At Georgia Tech, he was active as a co-instructor of a renewable energy

systems course and was often a guest lecturer on fuel cell systems as well as energy technology and policy. He also was an active lecturer in surrounding high schools. His active research has served as the basis for a strong record of journal publications and conference presentations already numbering close to 30.

As a teacher, Bradley believes strongly in hands-on engineering experiences for student learning. He says, "In addition to the fundamentals of engineering science, engineering education should be an education in scientific thinking, problem solving, group processing, and individual accountability." These are values long held high in the ME curriculum at Colorado State.



*Professor Tom Bradley*

Bradley has come to Colorado State because of the department's excellent reputation in combustion and renewable energy research, its entrepreneurial spirit, and its  
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### Joint CSU-JNC Workshop

As part of Colorado State's ongoing efforts to encourage the internationalization of its research and education efforts, several of the University's senior administrators and faculty visited various institutions of higher learning around the world, including China, India, South America, Europe, New Zealand, and Russia. In India, the primary institution for engineering and science research and education is the Jawaharlal Nehru Centre for Advanced Scientific Research (JNC), located in Bangalore. Several of Colorado State's faculty and administrators visited JNC over a period of two years. Tony Frank, Colorado State's provost and senior executive  
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**CSU-JNC Workshop Participants, April 2-3, 2008**

*Left to right back row: C. Narayana, Michael Elliott, G.U. Kulkarni, Dieter Hochheimer, S. Bhattacharya, Amy Prieto, Swapan K. Pati, James Sites, Tony Rappe, Randy Bartels, Matt Shore, K.S. Narayan, U.V. Waghmare, Bryan Willson, and Mani Manivannan. Front row: A.K. Sood, Allan Kirkpatrick, C. N. R. Rao, William Farland, and Tony Maciejewski.*

## Charles E. Mitchell Passes Away



*Professor Charles Mitchell*

Charles E. Mitchell, professor of mechanical engineering, passed away on Saturday, March 8, 2008, of a heart attack. Mitchell was 66 years old. He is survived by his wife, Veta, and three children, Charlie, Lynn, and Darla. Mitchell was a highly respected educator and researcher.

Mitchell joined Colorado State University in 1967 as an assistant professor of mechanical engineering. A Princeton University alumnus, he earned a bachelor's degree in aeronautical engineering in 1963 and master's (1965) and Ph.D. (1967) degrees in aerospace and mechanical engineering. He was considered an outstanding teacher and adviser by his colleagues and students. Over the course of his career, he taught a broad range of undergraduate courses in thermodynamics and engineering principles and developed new courses in aerospace propulsion and compressible fluids. At the graduate level, he created and directed several new courses, including mechanics and thermodynamics of propulsion, combustion, and wave propagation.

As a professor of mechanical engineering, Mitchell directed the research of more than 30 master's and doctoral students in the general fields of combustion, propulsion, and gas dynamics. He developed an international reputation in aerospace propulsion and gave invited lectures in the Republic of China and at the European Space Agency in The Netherlands. Federal agencies such as NASA, the Department of Energy, and the National Science Foundation sponsored his research on rocket engine combustion. In addition, he was the principal or co-investigator on projects funded by the Colorado Energy Research Institute, the Air Force Office of Scientific Research (AFOSR), and the National Renewable Energy Laboratory.

A memorial tree honoring Mitchell will be planted just outside the mechanical engineering department office. A fellowship is also planned to honor Mitchell.

For more information or to make a donation to the fellowship, please contact Shannon Mosness, shannon.mosness@colostate.edu, (970) 491-7028.

## From the Department Head



*Allan T. Kirkpatrick*

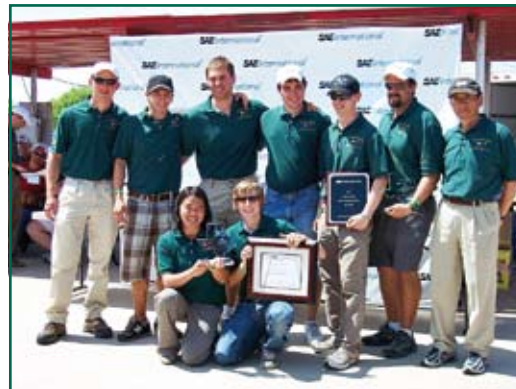
All greetings from the Department of Mechanical Engineering! I hope that you have had a good summer. Classes are now in full swing, and again the campus is full of new students embarking on their college careers. We have a good-sized freshmen class of 124 students. Eighty two percent are from Colorado, with Littleton (13), Colorado Springs (12), Loveland (8), and Fort Collins (8) being the top four cities of the freshmen class. We graduated about 120 students in May, so we remain one of the largest ME departments in the Rocky Mountain West.

In this fall newsletter, we have a variety of articles about events in the ME department that I hope you find interesting. We were successful in hiring a new faculty member this year, Tom Bradley, who recently received his Ph.D. from Georgia Tech. He will strengthen our new initiatives in the energy systems area with his interests in hybridized fuel cells and analysis of energy systems. More information about him is given in the article on Page 1.

In other news, our senior design teams performed at a very high level at the national competitions. Two competition groups deserve special recognition. The CSU SAE Aero Design West Team placed second in the open class, lifted 55 pounds, and won the Design Innovation Award for their takeoff assist system. The ASME Human-Powered Vehicle Team placed first in the utility event and second overall with their tadpole design. Please refer to the photos of the groups throughout this newsletter. Your continuing support of our students, particularly the Senior Design students, makes our participation in these events possible. Thank you, and best wishes for the fall.

*Allan Kirkpatrick*

Allan Kirkpatrick



*SAE Aero Design West Team  
Fort Worth, Texas  
April 2008*



*ASME Human-Powered Vehicle Team  
Reno, Nevada  
April 2008*

## Calendar of Events



*2007-2008 Robotic Eagle Lure  
Senior Design Team*

### Student Competitions (dates and locations to be announced):

- SAE Aero Design West
- ASME Human-Powered Vehicle
- SAE Formula Hybrid Competition
- Formula SAE Race Car Competition

### ME/College of Engineering/ University Events:

- Oct. 9 Annual 50th and Prior Reunion Dinner  
Fort Collins Hilton

- Oct. 10 COE 50th and Prior Reunion Breakfast  
Internet Café/Engineering Building
- Oct. 10 MEAP Board Meeting, Lory Student  
Center 214-216
- Dec. 20 Fall Undergraduate Commencement  
LSC Main Ballroom
- Mar. 28 Alumni and Friends Awards Dinner  
LSC Cherokee Park
- Apr. 17 Engineering Days/ME Senior Design  
Practicum Project Demos
- Apr. 17 MEAP Board Meeting, LSC 214-216

## Phillip Gibson Receives Distinguished Alumni Award

Phillip Gibson (B.S.M.E. 1963) was awarded the Mechanical Engineering Distinguished Alumni Award in April 2008. The College of Engineering alumni awards recognize former students whose accomplishments in their careers, their service to industry and the public, and/or their volunteer efforts have brought honor to that individual, to the College of Engineering, and to Colorado State University.

Gibson is president of TMT Labs in Huntington Beach, Calif., a business he started that conducts testing of wire rope and large cables for bridges, marine towing applications, structures, off-shore drilling rigs, and many other similar applications.

Before starting at Colorado State, Gibson had lived in many locations around the Midwest and attended several schools. His father worked in sales for Studebaker, and they had been in Denver for only a year before Gibson began his studies at Colorado State. He chose Colorado State ME because it was a popular

choice among his classmates and because the mechanical engineering department fit his interests very well. After leaving Colorado State, he headed to Northwestern University for graduate study.

After he left Northwestern, Gibson was hired at Battelle-Columbus in Ohio to work in their research labs. He worked on a project to test cables for marine applications. He then moved with Battelle to a testing facility located in Long Beach, Calif. Gibson's engineering team came to have a reputation for being experts at testing cables, and, as a result, they began to have an increasing number of repeat customers. Business was booming. Gibson and his engineers decided to launch their own company to do this work as a private company.

Much of their equipment was donated by an initial investor, and they were able to use it as collateral to acquire more startup funds. Gibson bought much of his testing supplies from an entrepreneur who was trying to do marine work to recover



Phillip Gibson received the Distinguished Alumni Award.

a Russian submarine. Gibson now owns and runs several different companies, though TMT is the largest. It has more than 20 engineers on staff and about 40 employees. His daughter, Kristen, is vice president.

To find more information about TMT, see [www.tmtlabs.com](http://www.tmtlabs.com). TMT is a successful company offering a wide range of testing services that

deal with the performance of wire rope and cables in many applications from high-strength steel cables to copper. In the proud tradition of Colorado State mechanical engineering graduates, Gibson has clearly been a success. Congratulations are due to Phil Gibson for receiving the 2008 Mechanical Engineering Distinguished Alumnus Award.

## Tom Bradley

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emphasis on practical engineering with real-world applications. He will collaborate with ME faculty Bryan Willson at the Engines and Energy Conversion Laboratory and with Professors Fitzhorn and Radford of the Motorsports Engineering Research Center (MERC). With Willson, Bradley is interested in examining the production processes for biofuels. In the motorsports program, he hopes to become involved with the new formula hybrid project in the design practicum. He also plans to develop a dynamometer laboratory and a fuel cell power laboratory at the MERC located at the Foothills Campus.

He hopes to develop funded research programs in vehicle design, integrated energy management and control in aerospace and automotive systems, and experiments and validation of simulations with applications. In general, his interest is in systems analysis of complex energy systems

such as PHEV systems. Such analyses are broad in scope including not only the complex technologies involved in the systems but also aspects such as environmental impact, economics, manufacturing, and practicality from the perspective of, for example, automobile manufacturers. A current interest is hybridized fuel cell-powered aircraft – an example in which fuel cells along with batteries would be used to power aircraft.

This fall, Bradley will be teaching ME 324, a mechanical design course that focuses on mechanisms and kinematics. He is interested in the senior design practicum course and would like to start a new course dealing with a systems engineering approach to renewable energy.

Bradley's wife, Kimberly Catton, is in the final stages of completing a Ph.D. in civil engineering at Georgia Tech and will be joining Colorado State's civil and environmental engineering faculty in 2009.

### Submit Nominations for 2009 Distinguished Alumni Awards

The College of Engineering is accepting nominations for outstanding awards from each of the five academic departments as well as to one engineering science alumnus and one collegewide honoree. Recipients of these awards are former students who, by their distinguished career and service to the college, University, state, nation, or world, have brought honor to the College of Engineering, Colorado State University, and themselves.

**Submit your nomination for these awards online at: [www.engr.colostate.edu](http://www.engr.colostate.edu) (click on "Alumni & Friends") by December 31, 2008**

You may also submit the following information by e-mail or regular mail to the address below:

- Designate the department for which you are submitting the nomination (mechanical engineering, engineering science, etc.).
- List the name of the nominee, along with his/her home address and phone number; business name, address, phone, and title; e-mail address; and a very brief statement regarding why you believe this nominee deserves this award.
- If you are nominating another individual (i.e., this is not a self-nomination), please also include your name, home address, and phone number; business name, address, phone, and title; and e-mail address.

**Shannon Mosness ([shannon.mosness@colostate.edu](mailto:shannon.mosness@colostate.edu))  
College of Engineering, 1301 Campus Delivery  
Colorado State University  
Fort Collins, CO 80523-1301**

# Joint Workshop

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CSU President Larry Edward Penley and Professor C. N. R. Rao.

vice president, led a delegation of Colorado State faculty to India in November 2006, in part to sign a formal agreement with the Indian Space Research Organization (ISRO) in Bangalore. The agreement calls for interaction between ISRO's Radar Development Unit and Colorado State relating to dual-polarized Doppler weather radar and the Virtual CHILL concept for Doppler weather radar systems.

Vice Provost for Graduate Affairs, Peter Dorhout, and two mechanical engineering faculty, Allan Kirkpatrick and Mani Manivannan, made a follow-up trip to the Nehru Centre in 2007. In January 2008, seven faculty members from the College of Engineering and the College of Natural Sciences visited JNC, attending the first of two scientific workshops. The second workshop was held at Colorado State University on April 2-3, 2008.

The mission of the workshop has been to develop stronger relationships between faculty and students at JNC and Colorado State; to set the stage for joint CSU/JNC proposals in advanced materials and other related areas; to discuss shared experimental and computational facility usage; and to discuss collaborative educational activities. More than 20 research presentations were made by Colorado State and JNC participants, including a lecture by Professor C. N. R. Rao, chief adviser to the prime minister of India for science and technology, on the chemistry of nanomaterials.

It is hoped that these interactions will encourage future faculty and student collaboration, joint funding of proposals, and a formal institutional link between Colorado State and the Nehru Centre for Advanced Scientific Research.

## 2008-2009 ME Scholarship Recipients

Scholarship Name	Recipient
A. J. Parfet	Kevin E. Walters
Advanced Energy-Hollis Caswell	Joseph C. Kennedy
	Laura M. Ruff
Allen Porter Mowry Memorial	Bradley M. Carr
	Laura M. Ruff
Amy and John Lawton	Nathan A. Miller
	Douglas C. Paxton
C. Byron and Donna T. Winn	Andrew J. Craig
Claude W. Wood	John B. Coughlin
	Seth L. Davies
	Laura J. Davis
	Austin L. Jurgensmeyer
	Bruce A. Mayberry
	Rodney A. Pace
	Nathan J. Petter
	Shawn D. Salisbury
Delano F. Scott	Timothy M. Campbell
Dr. Omnia El-Hakim Diversity	Jennifer N. Serrao
Engineering Scholars	Bradley M. Carr
	Ryan J. Kindt
	Jennifer N. Serrao
	Nicholas R. Walker
	Kevin M. Wills
George T. Abell	Nicholas P. Echter
	Jeffrey H. Gabel
Graham W. Howard Memorial	Dustin J. Ragusa
Ival V. Goslin	Torres A. Neuhoff
J. T. Strate Educational	Adam J. Hutchinson
Johannes and Seraina Gessler	Laura M. Ruff
Mechanical Engineering Alumni/Faculty	Kolby Leitch
	Matthew J. Wenger
Micro Motion Engineering	Erin E. Bickley
	Eric S. Dischinger
	Eric R. Mowrer
	Philip M. Tucker
NCPE	Theodore L. Catlin
Nicholas Angelopoulos	John K. Avery
Robert L. and Bonnie J. Walker	Steven A. DeHerrera
	Kelly D. Fagerstone
	Amanda N. Marchiani
	Ryan J. Slinger
Robert Mock Memorial	Matthew L. Ellis
	Zach R. Glueckert
Sjostrom Family	Syndi Nettles-Anderson
Vorhees Family	Jennifer E. Lee
Walery Richard Gawronski Memorial	Kevin E. Walters
Walter Scott, Jr.	Gregory J. Broughton
	Joseph D. Gerdom
	James W. Howland
	Zachary D. Simson

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2007-2008 Single-Axis PV Tracker Senior Design Team



2007-2008 Formula SAE Senior Design Team

## Class Notes

**Frank Pless ('61)** is retired and enjoying life in Greeley, Colo. Most of his work was in seismic exploration, with 10 years in Venezuela, Saudi Arabia, Libya, and Niger, and about 15 years in Alaska, the Gulf Coast, and the western United States.

**Frank M Knafelc ('62)** retired on Nov. 1, 2007, as director of engineering of The Clorox Company. His engineering career spanned 26 years with Clorox and 20 years with Colgate. During his career, he was the recipient of 14 patents. The Clorox Company recognized Knafelc by presenting him with the company's Engineering Excellence Award. Knafelc resides in Lafayette, Calif., with Janice, his wife and lifelong sweetheart. They have four children and nine grandchildren.

**Roger A Lewis ('65)** was commissioned a second lieutenant, spending four years flying KC135s in the Air Force. He flew for World Air Ways for one year after leaving the Air Force and was hired by Delta Air Lines in October 1972. He was the flying captain on Boeing 767-400 to Hawaii at the time of his retirement from Delta Air Lines in October 2002. While with Delta Air Lines, he flew the Convair 880, DC9, DC8, Boeing 727, 757/767, MD88, MD90, and L1011. He was based in Dallas for most of his career but also flew out of Atlanta, Miami, Chicago, and Los Angeles. Lewis's children are Amber, Gerrit, Katie, and Rebecca.

**James Demlow ('67)** worked for Martin Marietta Corporation, now known as Lockheed Martin, for six years. While at Lockheed Martin, he attended law school at the University of Denver. After practicing law for five years, he was appointed to the bench in Jefferson County, Colo. He plans to retire in January 2009, after serving 30 years and 11 months on the bench. He and his wife, Delsa, have 14 grandchildren and one great-granddaughter. He hopes to be accepted into the senior judge program in Colorado and may travel around the state trying cases in other jurisdictions. James and Delsa enjoy their two black Labs and the deer and elk running through their property in Evergreen, Colo.

**Ed Denham ('67)** has been a pastor at the Spirit of Joy United

Methodist Church in Coolidge, Ariz., for 10 years. As a registered mechanical and electrical engineer in Arizona and Colorado, he does consulting work for various for-profit and not-for-profit organizations.

**Tom Nycum ('68)** retired from Colorado College in Colorado Springs on June 30, 2008, ending a 36-year career in higher education administration. He held engineering administrative positions at the University of Nebraska-Lincoln, the University of Florida, and the University of California-Berkeley. In 1986, he moved to the University of California-Riverside as vice chancellor for administration and in 1992 moved to the University of Utah as vice president for administrative services. He finished his career at Colorado College, moving to Colorado Springs in 2000 as vice president for business and finance/treasurer. His mechanical engineering training was invaluable not only in engineering administrative positions but also during his time as the chief business officer for higher education institutions.

**Robert (Bob) Steffes ('69)** retired from the Iowa Department of Transportation Materials Research in 1993 and began managing the National Concrete Pavement Technology Center's research laboratory at Iowa State University. He and wife, Rache, live in Ames, Iowa, and enjoy visits from their five children and seven grandchildren.

**Ronald Beethe ('71)** operates RLB CIH, LLC, in Albuquerque, N.M., along with Jean Beethe, and Robert and Michelle Measles. The firm is an environmental health and safety consulting company that provides services to a wide range of clients. Typical services include indoor air quality investigations, inspection and sampling for mold, testing of form clandestine drug labs, health and safety training, and development of health and safety programs. Beethe finds his Colorado State engineering education helpful in all aspects of the business.

**David Robinson ('77)** received his master's in system engineering at AFIT in 1981 and his Ph.D. at Arizona in 1986. He is currently a distinguished member of the technical staff at Sandia

Labs in Albuquerque, N.M. He has just completed the launch assessment of the Mars Science Laboratory for the President's review and approval. The Mars Science Laboratory will be launched in September 2009. Robinson has been asked by the Department of Defense to be embedded with a small, military multinational task force as the civilian technical adviser in Afghanistan. His responsibilities are focused on counter-IED and include structural analysis of new counter-IED designs, social networking of terrorist networks, and risk analysis of operational plans. He will return to the United States in Spring 2009.

**Clarke Chambellan ('79)** received his master's in mechanical engineering from Denver University in June 2007. After 17 years working for the National Center for Atmospheric Research, he is starting an engineering services company, 2C Engineering, LLC. Chambellan is married with two children. His wife, Collette, works as an archeologist. Their daughter, Megan, just returned from Thailand after spending 10 months on a student exchange. She will be attending Fort Lewis College this fall. Their son, Adrien, has been attending Fort Lewis College and is preparing to spend his junior year in Germany as an exchange student.

**Kevin Dickson ('79)** owns and operates Dickson Redevelopment, LLC, in Denver, Colo., a professional property and redevelopment organization.

**Jim Mueller ('80)** retired from ConocoPhillips in September 2007 and now resides with his wife, Cindy (M.B.A. 2000), in Grand Lake, Colo. Their son, Michael, is working on his Ph.D. in mechanical engineering at Stanford University, and son Chris recently graduated from the University of Texas with a B.S. in computer science and is working for TimeGate Studios in Houston, Texas.

**Lisa (Gaskill) Johannsen ('83)** and her husband, Tom Johannsen, own a small product design firm in Centennial, Colo. Johannsen, Sorwick, & Associates, Inc., provides industrial design and mechanical packaging engineering to the medical product industry.

**T. Daniel Lebel ('84)** is a mission manager for United Launch Alliance in Colorado. He and wife, Karen, have two daughters, ages 14 and 15.

**P. McCoy Smith ('84)** is now intellectual property practice group director at Intel Corporation in Hillsboro, Ore.

**Harvey Mamich ('85)** is currently the navigation lead for NASA's new Orion manned spacecraft that will return astronauts to the moon in 2020. He is responsible for design, development, and testing of all absolute and relative navigation sensors and software on Orion. Mamich completed an M.S. in mechanical engineering at Arizona State University in 1990. He worked for Motorola in Phoenix, Ariz., for four years before returning to his home state of Colorado in 1990. He has now been with Lockheed Martin in Denver, Colo., for more than 18 years and has worked navigation, controls, and software on numerous launch vehicle and satellite programs.

**Ron Hink ('86)** is a design-build manager at the Blue Grass Chemical Agent Destruction Project located in Richmond, Ky.

**Mark Hartwell ('87)** has been employed 21 years by The Boeing Company in Everett, Wash. He is a Level 4 engineer currently involved in the main deck cargo lighting design for the new minor model 777 freighter airplane. He works closely with other groups, such as avionics, to incorporate related systems, such as the main deck alert system. He has also worked in payloads engineering for galleys, customer engineering as an option manager, service engineering for the enhanced security flight deck door, and now in systems engineering for electrical subsystems. For the last 14 years, his immediate family has been involved with rental property in the Everett and Fort Collins areas. For the last 15 years, he has volunteered as a Little League baseball umpire, which is good exercise for a person with a desk job. Since graduation, he has been fortunate to visit 19 foreign countries both for business and pleasure. During the last six years, he has visited South Africa, Namibia, and Zimbabwe for hunting and photographic safaris.

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## Class Notes

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**Andy Walker ('91)** is currently senior engineer at the National Renewable Energy Laboratory, where he recently developed a method to determine the combination of renewable energy technologies (photovoltaics, wind, solar water heating, solar ventilation air preheating, parabolic troughs for heat and power, biomass for heat and power, and daylighting) that minimizes life-cycle cost for a facility. He has piloted the method for Frito Lay factories; Anheuser-Busch breweries; the Town of Greensburg, Kan.; a high school in Idaho; the National Zoo in Washington, D.C.; a naval base in California; and agricultural research stations in Texas. In 2008, he presented his research to the National Academy of Sciences in Washington, D.C. He is active in ASME, organizing two conferences in 2008 and starting a term on the executive committee. Walker's three sons are Josh, 17, who won a contest to sit on the board of a soft-drink company; Alex, 13, who was on the football team that won the 2007 Colorado state championship; and Kirby, 4, who shows promise with finger paint. Andy often helps his wife, Renee, with her company, Ambient Energy, Inc., which provides energy modeling and sustainability ratings for large commercial buildings across the country.

**Tim Moore ('93)** and wife, Michelle, welcomed the birth of a son, Josiah Douglas, on Nov. 12, 2007. Tim is a program manager for TSG ESS Linus OpenSource Lab.

**Keith Davis ('95)** is a senior project engineer at FuelCell Energy, located in Danbury, Conn.

**Tobin Booth ('97)** is CEO of Blue Oak Energy based in Davis, Calif. His company is a solar electric design, engineering, and installation firm. Tobin and his wife, Janie, have one daughter, Alexandra, who is 18 months old.

**Roby DeManche ('98)** finished his M.B.A. at UC Berkeley Haas School of Business in Spring 2008 and is now a global supply manager at Apple, Inc. DeManche resides in San Francisco, Calif.

**Kyle Carnahan ('99)** currently works as technical manager for RasGas

Company (joint venture with Qatar Petroleum and ExxonMobil) in Doha, Qatar. He and his wife and three children really enjoy living in Qatar and have had the opportunity to travel to Egypt, United Arab Emirate, Bahrain, Spain, and Italy over the last year. Last fall, he was accepted into the Ph.D. program in reliability engineering at the University of Maryland. Carnahan is looking forward to some Colorado State Ram football victories.

**Canaan Manley ('99)** is currently working in the trim/chassis engineering department of Nissan located in Canton, Mo. Her responsibility is in new model development for the new North American light commercial vehicle division that Nissan has begun. She recently spent three weeks in Japan building a prototype frame and chassis for a new program to start in 2010.

**Gavin Haverstick ('01)** was recently promoted to the position of lead acoustical engineer at Auralex Acoustics in Indianapolis, Ind. He has been with the company since graduation. His responsibilities include acoustical design and modeling of recording studios, home theaters, houses of worship, auditoriums, conference rooms, arenas, and new product research and development.

**Jason Jonkman ('01)** recently earned a Ph.D. in aerospace engineering sciences from the University of Colorado at Boulder. He is employed as a senior engineer researching wind energy at the National Renewable Energy Laboratory near Boulder.

**Jordan P. Smith ('01)** was promoted to senior design engineer at Cameron Compression Systems in May 2008. He celebrated seven years of service with Cameron on July 2, 2008. He and his wife, Lindsay, welcomed their first child, son Syd, into the world on Feb. 8, 2008. They reside in Houston, Texas.

**Michael Schultze ('04)** is a mechanical engineer in the piping department of the Washington Division of URS Corporation located in Denver, Colo.

**Ken deAlmeida ('05)** lives in North Conway, N.H., and works for Dearborn Precision Tubular Products. He designs and fabricates

new machines for specialty manufacturing applications.

**Jeremy Nelson ('05)** has been with CPP, Inc., in Fort Collins since graduation. He is working towards his P.E. license and got married Feb. 1, 2008.

**Dennis Schmitt ('05)** filled a new position within EnCana as the rotating equipment engineer for all of the U.S. Rockies assets. He provides engineering support to their existing compression assets and provides strategic planning and engineering design for all future compressor assets in the Rockies.

**Adam Biegen ('06)** has been a mechanical design engineer with Conmed Electrosurgery since June 2006. He designs electrosurgical products that are used by doctors and nurses in the operating room. He has also designed injection-molded plastic parts, thermoform parts, sheet metal parts, and metal injection molded parts. The best part of his job is using CAD (ProE) almost everyday. He has become extremely proficient in ProE and has been able to learn most of the many modules.

**Cam DeCoster ('06)** currently works for Ball Corporation in Broomfield, Colo., as a project engineer in the plastics packaging division. He helps manage projects to create and commercialize PET beverage containers (such as a 20-ounce soda bottle or Gatorade bottle). He plans to be married in May 2009 to Leslie Hill, a Colorado State graduate in environmental health and safety.

**Jonathan Reynolds ('06)** is working at Woodward as a test engineer. He is starting a side business with **Brian Gray ('07)**, building electric cars. Their first car should be completed by September (see progress at <http://jabEV.com>). Reynolds and his wife are expecting their first child this December.

**Kelly Zuehlsdorff ('06)** is working on her master's in mechanical engineering from the University of Washington. With an emphasis in biomechanics, she is studying the material properties of foot and ankle ligaments and how the properties change with age and the diabetic

disease process. Her husband, **Dan Schmidt ('06)**, works for Boeing and currently oversees the oxygen system and upper deck sidewall installations for 747-400 passenger planes being converted to freighters. After meeting at Colorado State, Zuehlsdorff and Schmidt were married on June 29, 2008. The two reside in Seattle, Wash.

**Dawn Dalangin ('07)** completed her second degree, a B.M. in piano performance, in 2008. She became a finalist in several national piano competitions and has also been a recipient of numerous engineering and music awards, including winning first place at the 2006 Colorado State University Concerto Competition. While at Colorado State, Dalangin was working part-time as a piano teacher with more than 40 students. Last September, she decided to open her own piano school, the Amadeus Piano Academy in Fort Collins. In its second year, she continues to be director and head instructor. She is continuing her music education this fall with a Master of Music in piano performance. Dawn lives in Windsor, Colo., with **Matthew Bartell ('06)**, who also owns his own successful business, and their three dogs.

**Douglas Brooke ('07)** is a manufacturing engineer at Lanx, LLC, in Broomfield, Colo.

**Brandon Lucero ('07)** is a certification engineer at Recaro located in Fort Worth, Texas.

**Shaun Onorato ('07)** is a mechanical/design engineer with ProTerra, LCC, located in Golden, Colo.

**Joseph Pault ('07)** is a biomechanical engineer at Steadman Hawkins Research Foundation Biomechanics Laboratory in Vail, Colo.

**Adam York ('07)** accepted a mechanical engineering position with Lockheed Martin Space System Company in Littleton, Colo., working on the military support programs and performing structures design. His current plans include beginning a Master of Science in mechatronic systems at the University of Denver beginning next year.

**Peter Fox ('08)** lives in Littleton, Colo., and works as an energy auditor for McKinstry in Conifer, Colo.