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Peter Fedkiw was named head of our Department of Chemical and Biomolecular Engineering effective January 1, 2008.

Peter is an expert in electrochemical reaction engineering and is known for his work in electrochemical devices for energy production and storage. His current research involves the study of composite polymer electrolytes for lithium batteries based on functionalized silica, which relates to the development of rechargeable lithium batteries for use in portable consumer electronics and electric vehicles. His group pioneered the use of electrodes protected by perfluorinated ionomer thin films for high-current efficiency redox reactions to regenerate spent redox reagents. His group was also the first to explore metallized polymeric-electrolyte-membrane reactors for electrosyntheses. His early work on pulsed-electrochemical oxidation of methanol as a means to remove in situ poisonous reaction intermediates from an electrode provides a basis for today’s developers of direct methanol fuel cells to extend the lifetime of the fuel cell catalysts.

Peter is a member and Fellow of the Electrochemical Society, and member of the American Chemical Society, American Institute of Chemical Engineers, American Association for the Advancement of Science, Materials Research Society, and Sigma Xi. He served as vice chairman and chairman for the AIChE Annual Meetings programming area in Electrochemical Fundamentals, and he represents the AIChE to the Working Party on Electrochemical Engineering of the European Federation of Chemical Engineers. He is an active participant in the Electrochemical Society, and he was treasurer 2002–2006. He served as a part-time Intragovernmental Personnel Act (IPA) employee of the US Army Research Office (ARO) in Research Triangle Park, NC, from 1995 to 2008, where he was the science and technology advisor to ARO’s Advanced Energy Conversion program manager during his tenure.

Peter earned a BS degree in Chemical Engineering from the University of Delaware in 1974 and a PhD in Chemical Engineering from the University of California at Berkeley in 1979. He joined our department in 1979 as an assistant professor. Peter’s wife, Sharon, also works at NC State, as a coordinator for classroom improvement. They have three children: Catherine, who graduated in 2004 from UNCW and now resides in the Washington DC area, Timothy, who received a BS in Aerospace Engineering in 2008 from NC State and is now attending graduate school at MIT, and Chris, who is starting his freshman year in our department.

Peter Kilpatrick, who served as our department head since January 2000, departed in December 2007 to become the Dean of Engineering at the University of Notre Dame.

### CBE Department Heads

- **1924:** Dr. E. E. Randolph becomes first Department Head
- **1945:** Dr. Edward M. Schoenborn
- **1966:** Dr. James K Ferrell
- **1980:** Dr. Harold B. Hopfenberg
- **1987:** Dr. David F. Ollis
- **1988:** Dr. James K Ferrell serves as Interim Department Head
- **1989:** Dr. George W. Roberts
- **1994:** Dr. Ruben G. Carbonell
- **1999:** Dr. Peter K. Kilpatrick is appointed Interim and becomes permanent in 2000
- **2008:** Dr. Peter S. Fedkiw
Christine Grant appointed Associate Dean

Christine Grant was appointed associate dean for faculty development and special initiatives in the College of Engineering, effective January 1, 2008. This new position was created to provide support for faculty in the College. A critical component of this position is the development and facilitation of a set of programs and initiatives that will foster faculty success. The ultimate goal is to create an enhanced faculty community that will foster easy, identifiable and productive collaborations in teaching, research, extension and service. Christine will be working directly for Dean Martin-Vega and with faculty from the entire College of Engineering. She will maintain 50 percent status in our department, continuing with her teaching and research programs.

Ruben Carbonell named Director of BTEC

Ruben Carbonell was appointed Director of the Golden LEAF Biomanufacturing Training and Education Center (BTEC) effective January 1, 2008, succeeding Peter Kilpatrick. BTEC’s purpose is to fuel the growth of North Carolina’s emerging biomanufacturing industry by creating a well-trained, industry-focused workforce. To do this, they have created a system of advanced, hands-on training and education in a current Good Manufacturing Practice (cGMP) environment using facilities and equipment that match those in place at the world’s leading biomanufacturing companies.

Ruben will also continue to direct the William R. Kenan, Jr. Institute for Engineering, Technology and Science as he has since 1999.

Jan Genzer becomes CBE Associate Department Head

Jan Genzer was named Associate Department Head of our Department of Chemical and Biomolecular Engineering effective January 2, 2008. The recipient of numerous awards and honors, Jan is a Fellow of the American Physical Society and received the John H. Dillon Medal from the APS in 2005. He is known for his work in the manipulation of surface properties of monolayer and macromolecular films and the self-assembly and chemical surface pattern recognition and for synthesis and application of random-blocky copolymers. His current research includes materials self-assembly and directed assembly and the behavior of polymers at surfaces, interfaces and in confined geometries. Specifically, he is working with pattern recognition by copolymers, directed assembly of oligomers and polymers on elastomeric substrates, and molecular gradients on substrates.
**New Faculty**

**Wesley Henderson**

joined our department in August 2007 as an assistant professor. He has worked as a summer fellow in the Environmental Energy Technologies Division (EETD) of the Lawrence Berkeley National Laboratory (1995) and as a staff researcher in the MST-11 Division (Electronic & Electrochemical Materials & Devices) at Los Alamos National Laboratory (1996–1997). He was a NSF International Postdoctoral Research Fellow at Ente per le Nuove Technologie, l’Energia e l’Ambiente (ENEA - Casaccia Research Center - Italian National Laboratory for New Technologies, Energy and the Environment), Advanced Energy Technologies Division, Rome, Italy (2002–2004) and then served as an assistant research professor in the Department of Chemistry at the US Naval Academy (2004–2007).

Wesley earned his BS in chemistry from the University of California at Santa Barbara in 1996 and his PhD in materials science and engineering from the University of Minnesota in 2002. His teaching interests include the Transport and Separations undergraduate courses, and he is currently developing a CHE 596 graduate course entitled Engineering Challenges at the Energy Frontier. This course will explore the role of chemical engineers and materials scientists in addressing technological hurdles in batteries, electrochemical capacitors, fuel cells, solar energy, biofuels, phase-change materials and more. His research encompasses the use of ionic liquids (liquid salts) as electrolyte materials in advanced lithium batteries and electrochemical capacitors as well as their use as a new-generation of solvents for cellulosic biomass processing to fuels and chemicals. The research targets projects which promote Plug-in Hybrid Electric Vehicles (PHEVs).

Wesley and his wife, Nicole, have a son, Simon. Another child is on the way for December 2008. His personal interests currently center on activities enjoyable to a two-year-old boy and sifting his hands through the soil in his slowly growing garden. Past interests have included world travel, expansive reading and throwing himself off of cliffs and airplanes while serving in the US Army.

**Michael Dickey**

joined our department in August 2008 as an assistant professor; he describes the opportunity as his “dream job.” He recently completed an appointment as a post-doctoral fellow in the lab of Professor George Whitesides at Harvard University. Michael has several years of industrial work experience as a co-op for Kimberly Clark and as a chemical engineer for Merck. Michael has received several honors, including the Georgia Tech Presidents Scholarship, a NSF Graduate Fellowship, and a NIH Post-doctoral Fellowship.

Michael earned a BS in chemical engineering from the Georgia Institute of Technology in 1999 and a PhD in chemical engineering from the University of Texas at Austin in 2006 under the guidance of Professor Grant Willson. Michael will teach Chemical Process Principles (CHE 205) this fall. His research interests are broad, but he is primarily interested in developing new materials and methods for micro- and nanofabrication. The goal of this work is to build functional devices (e.g., nanoelectronics, solar cells, sensors, photonic structures) in a simple, inexpensive and scalable manner.

Michael and his wife, Kim, are expecting their first child in September. In his spare time, Michael enjoys music (he plays guitar), sports (both playing and watching) and reading. He grew up in Raleigh and is an avid fan of NC State athletics. If you would like to meet Michael this fall, he can be found at Carter-Finley stadium on Saturday afternoons.
Message from the Department Head

Dear Chemical and Biomolecular Engineering Alumni and Friends,

Greetings from your new department head! I moved into this position in January 2008, after Peter Kilpatrick resigned from NC State in order to become Dean of the College of Engineering at the University of Notre Dame. As many of you know, Peter’s contributions to the Department and the University include service as a classroom teacher, a mentor to numerous graduate and undergraduate students, the director of a highly respected research program, and seven years as head of the department.

During Peter’s tenure as head, we changed our name from Chemical Engineering to Chemical and Biomolecular Engineering, hired seven faculty members, increased the graduate student enrollment from 80 to 109, increased research-based funding from $5.4M to $6.5M, awarded 800 BS degrees, 175 MS degrees and 106 PhD degrees, and moved from Riddick into our new home on the NC State Centennial Campus. Peter was also a prime mover in the effort which eventually led to funding in the amount of $37.5M to design and construct the Golden LEAF Biomanufacturing Training and Education Center, and he served as its Founding Director at the same time that he retained his position as CBE department head. We miss him both as a friend and as a model faculty member.

Going forward, my vision for the Department is to provide our faculty with the resources and administrative assistance they’ll need to continue building our national reputation as a Department where the quality of our academic and research programs are high at the same time that our students experience a challenging, yet supportive environment. Specifically, that means hiring additional faculty members, increasing the graduate student enrollment and graduate degrees awarded, and increasing the amount of research-based funding. The Department will continue its vigorous support of the undergraduate program and our undergraduate students. We’re espe-

Come by and see us in Engineering Building I on Centennial Campus.
cially pleased that our AIChE Student Chapter will be hosting the 2010 AIChE Southern Regional Conference, which is expected to draw over 500 chemical engineering students and faculty from throughout the Southeast. Finally, and most importantly, we’ll continue our tradition of providing our graduates with the best possible preparation for their careers.

Our original plan with this edition of the newsletter was to send it in a large postal mailing shortly after I took over as department head. However, at about that same time revenues to the State of North Carolina began to fall, and the decline led to several rounds of budget cuts and reversions to the State of previously allocated funds. At that point although the final newsletter layout was essentially complete, it became obvious that we couldn’t afford the cost of a mass mailing. And now after waiting in hopes the economy would improve we’ve cobbled together enough funding to send the newsletter rather than continuing to hope the budget trends will reverse in the short-term.

Given the budget situation we’re also exploring whether there might be alternative ways to deliver future editions of our newsletter. Specifically, if we can send significant numbers of the newsletters using email, monies will be freed to send the remaining copies by regular mail. And so I will appreciate your letting us know if you’d prefer to receive electronic copies of future newsletters instead of paper copies. If yes, please let us know by sending a note to: che_alumni@ncsu.edu.

Your message should include the email address where you’d like the copies to be sent.

In closing I hope you, our alumni, will continue to be engaged with the Department and its programs, or will re-connect and join us as we move forward towards what I believe will be a very bright future.

With my best regards,

Peter Fedkiw

Become a Chemical Engineering Fan!

Stay up to date on the latest departmental news by becoming a fan of our new Facebook page, “NC State Chemical Engineering.” You can find our page at the link www.facebook.com/pages/Raleigh-NC/NC-State-Chemical-Engineering/390634006158?v=wall. This is a great way to learn about recent faculty and alumni news, see photos of departmental events, and reconnect with other CHE classmates and alumni. If you have news items to suggest for the Facebook page, please email Dr. Lisa Bullard at lisa_bullard@ncsu.edu.

Research programs continue to expand and provide educational opportunities for both our undergraduate and graduate students.
The NC State College of Engineering selected alumnus Wayne Day (‘65) as a Distinguished Engineering Alumnus (DEA) winner for 2007. The award was announced by Dr. Louis Martin-Vega, dean of the College of Engineering, at a banquet held November 8, 2007 at the Capital City Club in Raleigh.

Immediately after receiving his BS degree from our department, Wayne went to work for Riegel Paper at their paper mill near Wilmington, NC. Duty called and Wayne was sent to Korea for 13 months as a Lieutenant in charge of construction of various roads, officer clubs, and other facilities.

After his military service ended, Wayne took a sales position with Honeywell. It was through this job that he met John Joseph Kirlin, the owner of a small mechanical contracting business in Rockville, MD. Wayne ended up going to work for JJ Kirlin in 1970, beginning a 36 year career at the company.

In 1984 Wayne bought the business from Mr. Kirlin and became president and CEO of the company. Under his guidance, motivation and leadership, the company grew tenfold, through the creation of fabrication shops, 3-D CAD and commissioning, and by branching out into new market places. They opened offices in Baltimore, Md.; Raleigh; Columbia, S.C.; and in Tampa, Orlando and Ft. Lauderdale, Fla.

Under Wayne’s leadership, JJ Kirlin has worked on many marquee projects, including the Redskins Stadium, Camden Yards, NC State Sports and Entertainment Arena, MCI Arena, Tropicana Field, National Archives, the Smithsonian Air and Space Museum, the Supreme Court, the White House, the US Capitol, and most notably, renovation of the Pentagon after 9/11.

Wayne served on the board of the Mechanical Contractors of America and was its president in 1998. He is a Holladay Lifetime Giving Society member, a Frank Seely Society member, and a lifetime Alumni Association member. The football field at Carter-Finley Stadium was named the Wayne T. Day Family Field in recognition of his generous support of the university.

Phil Westmoreland Elected to AIChE Board

Phil Westmoreland (’73) has been elected to the Board of Directors of the American Institute of Chemical Engineers (2008–2010). He previously served the AIChE as secretary of the Knoxville-Oak Ridge Section, chair of the Central New England Section, founding chair of the Computational Molecular Science and Engineering Forum, a founding director of the Nanotechnology Science and Engineering Forum, and chair of AIChE’s National Program Committee. His awards from AIChE include the Public Relations Award (1977), NATE Award (Central New England Section AIChE Tribute to Excellence, 1991) and George Lappin Award (2007).

Phil is presently on leave from his position as professor of chemical engineering at the University of Massachusetts Amherst, serving as the program director for Combustion, Fire, and Plasma Systems at the National Science Foundation.
Carlos Gutierrez (‘60) is the driving force behind a recently announced joint venture between URRC (www.urrc.net) and Coca-Cola. The companies are currently constructing a $45 million polyethylene terephthalate (PET) bottle recycling plant in Spartanburg, SC. Coca-Cola’s ultimate goal is to recycle or reuse every PET plastic bottle it sells in the United States.

The 30-acre plant should open in early 2009. It is designed to produce about 100 million pounds of food-grade recyclable plastic per year. That is the equivalent of nearly 2 billion 20-ounce PET bottles or about 10 percent of what Coca-Cola sells in the United States each year.

Greg Hatem (‘85) and Michael Lemanski (‘96) are leaders in the efforts to revitalize downtown Raleigh and Durham, respectively. Local business leaders are often surprised to learn that Greg and Michael are chemical engineering graduates.

Greg leads Empire Properties (www.empire1792.com), a company that has renovated more than 40 historic buildings in Raleigh, investing some $70 million. The renovated space has become home to five new restaurants, a nightclub, fitness center, art galleries and his own apartment in the old Raleigh Times newsroom.

Michael leads Greenfire Development (www.greenfiredevelopment.com), which has acquired 31 buildings in and around downtown Durham. Michael and his partners recently announced a $284 million plan to renovate over 1 million sq. ft. into residential, hotel, office and retail space. Brother Joe Lemanski (‘93) is the firm’s construction manager.

Feature articles on both Greg and Michael can be found in the Summer 2008 issue of NC State alumni magazine.

SchoolDude in Rapid Expansion Mode

Kent Hudson (‘75) has become a busy entrepreneur as CEO and co-founder of SchoolDude (www.schooldude.com), a management solutions company that helps schools run more like businesses. SchoolDude’s software helps educational institutions reduce overhead costs through better inventory control, budget management and maintenance scheduling.

SchoolDude announced early in 2008 that it is now serving more than 3,000 clients across the United States, Canada, Australia, Europe and the Dominican Republic. Since its inception in 2000, SchoolDude has steadily maintained its rapid year-to-year growth rate, adding more than 600 customers in 2007 alone.

The business moved its 130 employees into a larger headquarters in Cary (30,000 sq. ft.) in late 2007. Kent expects to have 150 employees by the end of 2008 and projects sales will rise 37 percent to $18.5 million. His goal is ”to help America’s schools save $1 billion by 2010.”

URRC Enters Joint Venture with Coca-Cola

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New Endowments

Ernest James and Ethel Hudgins Angelo Memorial Scholarship

Bill Angelo ('42) donated a commercial property valued at $100,000 to a Charitable Remainder Trust (CRT) he established in the NC State Engineering Foundation. The CRT will pay Bill for life and the remainder will add to the Ernest James and Ethel Hudgins Angelo Memorial Scholarship that Bill and his brother, Jim (EE ’39), established in honor of their parents. This award goes to students from Forsyth County who show specific interest in environmental engineering and who demonstrate academic merit and who have financial need.

Verna Strickland Ramsey Scholarship

Ron Brown ('74) established the Verna Strickland Ramsey Endowed Scholarship in memory of his mother. Preference is given to entering freshman from eastern North Carolina or from rural areas of North Carolina. Ron initially contributed $25,000 and is building the endowment to $50,000. Ron earned his BS degree in 1974 and initially went to work for Midrex in Charlotte. He is currently president of Browns Builders Supply in Rose Hill and owns the Cabinet Gallery in Wilmington, NC. Ron has been an active member of the NC State Engineering Foundation Board of Directors.

Wayne T. Day Family Fellowship

Wayne Day ('65) and his wife, Mary Grace, contributed $260,614 to the department in September 2007 to establish the Wayne T. Day Family Fellowship Fund. Initially the fellowship will provide $10,000 per year to support graduate students in our department. Mary Grace was a teacher in the Fairfax County, Va., school system when they met, and Wayne and Mary Grace are especially interested in education.

BE Lauer Honors Dr. E.E. Randolph and Professor J. Frank Seely

B.E. Lauer left approximately $25,000 through his estate to create two endowments: the E. E. Randolph Memorial Fund and the J. Frank Seely Memorial Scholarship. Dr. Lauer’s desire was to memorialize Dr. Randolph, the first head of our department and Professor Seely, who was a beloved undergraduate coordinator of advising for many years. Dr. Lauer was a professor in our department from 1935 until 1946.

Anonymous Discretionary Enhancement Fund

An anonymous donor contributed $30,000 to create an endowment for discretionary support to our department. The endowment will provide $1,200 each year in much needed unrestricted funds.

Chemical Reactions and Chemical Reactors

The long-awaited textbook on chemical reaction engineering by our own George Roberts has made it into print. Chemical Reactions and Chemical Reactors is being published by John Wiley & Sons, Inc., copyright 2009. The book is intended to be used for a one semester undergraduate course in chemical reaction engineering.

In the acknowledgements George thanked many professors including: Ruben Carbonell, Joseph DeSimone, Richard Felder, Bob Kelly (PhD ’81), Henry Lamb ('82), David Ollis, Baliji Rao, Eduardo Saez, and Jerry Spivey ('72). George also thanked his many Teaching Assistants: Collins Appaw (PhD ’05), Lisa Barrow, Diane (Bauer) Beaudoin (PhD ’96), Chinmay Bhatt (MS ’97), Matt Burke (PhD ’01), Kathie Burns (MS ’02), Joan (Biales) Frankel (MS ’97), Nathaniel Cain (MS ’06), Rusty Cantrell (PhD ’96), Naresh Chennamsetty (PhD ’06), Sushil Dhoot (MS ’00), Laura Beth Dong (MS ’06), Kevin Epting (PhD ’04), Amit Goyal (MS ’05), Shalini Gupta (PhD ’07), Surendra Jain (PhD ’08), Conchita Jimenez-Gonzalez (PhD ’01), April (Morris) Kloxin (’01, MS ’04), Steve Kozup (M ’97), Shawn McCutchen (PhD ’96), Jared Morris (’05, MS ’06), Jody (Moss) Ransom (’03, MS ’04), Hung Nguyen (PhD ’04), Joan Patterson (PhD ’07), Niru (Ramamurthy) Kenkare (PhD ’98), Manish Saraf (MS ’01), George Serad (MS ’99), Fei Shen (MS ’06), Anuraag Singh (PhD ’97), Eric Shreiber (PhD ’99), Ken Walsh (PhD ’94), Dawei Xu (PhD ’05), and Jian Zhou (PhD ’03). Finally he thanked graduate students Tonya Klein (PhD ’99), Jorge Pikunic (PhD ’03) and Angelica Sanchez (PhD ’06) and undergraduate students Amanda (Burris) Ashcraft (’04) and David Erel (’04).
Rich Spontak Receives Holladay Medal

Rich Spontak, professor of chemical and biomolecular engineering, was honored with a Holladay Medal at the May 10, 2007 Honors Baccalaureate. He has devoted 23 years to research, teaching, service, and administration at NC State. He served as head of our Department of Chemical and Biomolecular Engineering from 1994 to 1999. Since 1999, he has directed the William R. Kenan, Jr. Institute for Engineering, Technology and Science. He established the highly successful Kenan Fellows for Curriculum and Leadership Program, which has become a national model for university K-12 outreach. Also, since 1999, he has co-directed the NSF Science and Technology Center for Environmentally Responsible Solvents and Processes, which was created by a National Science Foundation grant that was the largest ever received by the UNC system at the time of the award.

Ruben's research has resulted in more than 190 publications, 22 patents and more than $22 million in research funding. He has advised more than 70 master’s and doctoral students and 33 postdoctoral students and visiting faculty. His recent work in bioseparations led to the identification of a specific ligand for the prion protein responsible for mad cow disease in humans. This ligand is being used to remove prion protein from blood products. He is a fellow of the American Institute of Chemical Engineers and a recipient of a number of teaching and research awards, including NC State’s Alumni Distinguished Graduate Professorship.

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Ruben Carbonell Receives Holladay Medal

Ruben Carbonell

Rich Spontak Receives UNC Board of Governors Award

Rich Spontak, professor of chemical and biomolecular engineering, is the 2008 NC State recipient of the UNC Board of Governors Award for Excellence in Teaching. This is the most prestigious faculty award in the UNC System for teaching excellence. Rich is one of 17 educators—one from each UNC System campus—who was presented with Awards for Excellence in Teaching by UNC System President Erskine Bowles and Board of Governors Chairman Jim Phillips Jr. at the Board’s May 9, 2008, meeting.

The Board of Governors Awards for Excellence in Teaching were created in 1994 to underscore the importance of teaching and to encourage, recognize and reward outstanding teaching. Nominees for the award must be tenured professors who have spent at least seven years at the nominating institutions and who have “demonstrated excellent or exceptional teaching ability over a sustained period of time.” Since joining the NC State engineering faculty 15 years ago, Rich has integrated teaching and research with equal passion and rigor. He has encouraged his students to engage with the real problems and challenges facing the world, and his students have become well known for participating in science-based competitions and projects. Twenty-six of his undergraduate students have been listed as co-authors on peer-reviewed journal publications. Rich also has advised more than 100 students at NC State.

Rich Spontak Receives UNC Board of Governors Award

Rich Spontak

Spring 2010 News for Alumni and Friends
Lisa Bullard Receives NC State Faculty Advisor Award

Lisa Bullard is the 2008 winner of the NC State Faculty Advisor Award. She received the Award from the Provost during a luncheon ceremony on May 1, 2008. The award is given to an advisor whose primary responsibility is as a teaching/researching faculty member. The criteria for the award states, “The winner of this award will exhibit a strong commitment to student success through availability to advisees, commitment to guiding students in career and academic paths and awareness of policies and procedures.”

Joe DeSimone Receives the 2008 Lemelson-MIT Prize

Joe DeSimone received the 2008 Lemelson-MIT Prize for his pioneering inventions, entrepreneurial success and commitment to mentorship. Joe was recognized for his groundbreaking work in environmentally friendly manufacturing and promising applications in gene therapy, drug delivery and medical devices. His inventions include the use of supercritical carbon dioxide to produce fluoropolymers, the development of a fully bioabsorbable, polymer-based stent, and the production of nanoscale particles that can diagnose and treat disease.

Jan Genzer Named Fellow of American Physical Society

Jan Genzer has been named a Fellow of the American Physical Society (APS). Jan was honored for “the design, synthesis and modeling of engineered surfaces and interfaces.” Jan’s research interests include material self-assembly and directed assembly and behavior of polymers at surfaces, interfaces and confined geometries.

Jan Genzer
Carol Hall Named Fellow of American Physical Society

Carol Hall has been named a Fellow of the American Physical Society (APS). She was honored for “creating a new paradigm to simulate protein aggregation through a combination of intermediate-resolution molecular models and the discontinuous molecular dynamics method.” Carol is a leading researcher in applied thermodynamics and molecular simulation. She is currently focusing her expertise on the formation of ordered protein aggregates called amyloid, a cause or associated symptom of Alzheimer’s, Parkinson’s and the prion diseases.

Jason Haugh Receives Alcoa Research Award

Jason Haugh is the College of Engineering recipient of the Alcoa Foundation Engineering Research Achievement Award for 2008. The Award recognizes a young faculty member for their outstanding research achievements during the preceding three years. Jason’s research interests include biomedical and biochemical engineering, signal transduction networks and mammalian cell engineering.

Greg Parsons Receives Alcoa Research Award

Greg Parsons is the College of Engineering recipient of the Alcoa Foundation Distinguished Engineering Research Award for 2008. This Award recognizes a senior faculty member for their continuing outstanding research achievements over a period of at least five years. Greg’s research interests include very low temperature plasma-enhanced chemical processes for formation of semiconducting thin films on plastics, carbon nanotube structures, atomic layer deposition, biomimetic molecular photovoltaics and molecular electronics.
More Faculty Awards

Lisa Bullard and Rich Felder were awarded the 2007 Glenn L. Martin Best Paper Award from the American Society for Engineering Education (ASEE). Lisa and Rich presented their paper, “A Student-Centered Approach to the Stoichiometry Course,” at the 2007 ASEE Annual Meeting held in Honolulu.

Ruben Carbonell has been named Fellow of the Industrial and Engineering Chemistry (I&EC) Division of the American Chemical Society (ACS). He received the I&EC Fellow award at the spring 2008 national ACS meeting in New Orleans. A symposium was held in his honor at the same meeting.

Joe DeSimone and Bob Kelly were named Fellows by the American Association for the Advancement of Science (AAAS) in February 2007. Joe and Bob were elected for their achievements respectively in chemistry and engineering. AAAS is the world’s largest general scientific society and the publisher of the journal Science. Each year, the AAAS Council elects members whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished. Fellows are nominated by their peers and undergo an extensive review process.

Rich Felder received an Honorary Doctor of Science degree from the State University of New York, bestowed by Binghamton University. He was presented the award at the graduation ceremony of the Harpur College of Arts and Sciences on May 18, 2008.

Bob Kelly was presented an Alumni Distinguished Graduate Professor Award for 2006–2007 by the Alumni Association. Bob was one of only three recipients who received this award at the May 2007 Honors Baccalaureate.

Rich Spontak received the 2008 Chemistry of Thermoplastic Elastomers Award from the Rubber Division of the American Chemical Society (ACS). Sponsored by Advanced Elastomer Systems, the award was established by the ACS Rubber Division in 1991 to recognize outstanding contributions in the field of thermoplastic elastomer chemistry.

Rich Spontak received the 2007 Ernst Ruska Prize from the European Electron Microscopy Society. Ernst Ruska won the 1986 Nobel Prize in Physics, along with Gerd Binnig and Heinrich Rohrer, for his discovery and development of the electron microscope. (Binnig and Rohrer shared half the prize for their discovery of the scanning tunneling microscope.) The prize is awarded on the basis of the quality and originality of scientific achievements in the field of electron microscopy, obtained during the five years preceding the application.

Department hosts ACS Colloids and SoftMatt Symposia

Our department hosted two prestigious symposia during one week in June 2008—the 82nd Annual Colloid & Surface Science Symposium and the 1st Annual SoftMatt Symposium.

The Colloid & Surface Science Symposium was chaired by Orlin Velev and Peter Kilpatrick (now at the University of Notre Dame). It is associated with the ACS Division of Colloid & Surface Science. The event took place from June 15 to 18 at the McKimmon Center. A total of 537 papers were presented and almost 600 participants attended from around the world.

The inaugural SoftMatt Symposium was organized and chaired by Jan Genzer. The event took place on June 19 in EB1. A total of 54 papers were presented and approximately 120 participants from around the world came to our building for the event.
The College of Engineering at NC State University has teamed with Craven Community College in Havelock to offer B.S. degrees in engineering. The new degree offering was approved by the UNC Board of Governors on March 7, 2007 and became available to students for enrollment beginning with the Fall 2007 semester.

Through the new program, engineering courses for the undergraduate degree program will be delivered from NC State through the Engineering Online program, an Internet-based distance education program designed to offer engineering undergraduate and graduate courses to working professionals. Students will complete general education coursework from Craven Community College.

The new degree offering at Craven’s Havelock campus joins an existing program at the University of North Carolina at Asheville as NC State’s only two undergraduate engineering degree programs available completely via distance education. The program also builds on Craven’s existing 2+2 engineering partnership program with NC State, which has allowed students to complete their first two years of coursework at Craven and then transfer to Raleigh to complete their engineering degrees.

**NC State Offers Engineering Degree in Havelock**

**Forget Petroleum: Pick Your Fuel of the Future**

Henry Lamb (’82) is part of a team of NC State researchers who have developed a fuel refining process that could revolutionize America’s energy industry. But not everything will change. You’ll still fill up your car with gasoline, use propane for your barbecue grill and reach your favorite vacation spot in an airliner powered by jet fuel.

The revolution will happen at the molecular level. Simply put, NC State researchers have developed a process that enables them to take virtually any fat source and chemically alter it so that it looks, acts and burns just like petroleum-based fuel.

“The process is flexible enough that we can make any fuel we want,” says Mechanical and Aerospace Engineering Professor Bill Roberts. “By changing the catalyst, temperature and pressure over time, we can make gasoline, diesel, heating oil, and even jet fuel.” It’s not magic, Roberts says, it’s chemistry.

In a not-too-distant future envisioned by Roberts, expect to see an oil refinery in Arizona, pumping out tens of thousands of gallons of gasoline for local consumers. But instead of importing crude oil from Saudi Arabia as its fuel source, the facility will use simple fats harvested from plants.

“If we tie the refinery to an algae that we can grow in the desert in clear plastic tubes in salt water, then we have a feedstock supply that is renewable,” he says. “Plus, that won’t impact the food supply and drive up the cost of groceries.”

In North Carolina, you may someday see processing facilities that use fats from animals, such as hogs and poultry.

The innovative process could help the U.S. reduce its dependence on foreign oil and—equally important—reduce its reliance on fossil fuels that emit greenhouse gases. Henry Lamb is the chemistry expert on the project. He says the chemistry behind the process is fairly simple and has been used in petroleum refining for nearly a century. In fact, he sees physical and chemical similarities between crude oil and animal fat.
Alumni Notes

Bob Hinkle (‘48) was honored at the March 13, 2007, Badin Town Council meeting for his 59 years of service to the community and his 51 years of service as Scoutmaster of Troop 42. Bob was presented a framed resolution of recognition and a key to the city.

Carlos Gutierrez (’60) has entered his company, URRC, into a Joint Venture with Coca-Cola to recycle PET bottles. (See story on page 7.)

Milt Williams (‘61) has retired from Freudenberg Nonwovens and has moved to Columbia, SC.

Richard Phillips (‘64) will serve on the Board of Directors for a 50/50 Joint Venture between International Paper and Ilim Pulp, the largest pulp and paper producer in Russia. Richard will be chairman of the Board Committee on strategy and capital investments (planned at $1.5 Billion over the next 5 years).

Wayne Day (‘65) has been named a 2007 Distinguished Engineering Alumnus at NC State. (See story on page 6.)

Greg Hicks (‘68) was inducted into the North Carolina Chapter of the National Wrestling Hall of Fame. Greg concluded his Wolfpack wrestling career in 1968 with 35 straight victories and 3 ACC titles, and served as a volunteer assistant coach for NC State from 1984–2006. Greg is the president and owner of Financial Resource Management in Raleigh.

Randy Boyette (‘71) is happily retired after 31 years with Weyerhaeuser. He is still living in Mississippi but on the road a lot enjoying the RV lifestyle.

Frank Louzek (‘72) has taken a job with The Epsten Group in Atlanta, GA, as their Senior LEED (Leadership in Energy and Environmental Design) Project Manager.

Phil Westmoreland (‘73) has been elected to the Board of Directors of the American Institute of Chemical Engineers (2008–2010). (See story on page 6).

Kent Hudson (‘75), CEO and Co-Founder of SchoolDude, was selected as a finalist in the Carolinas region for the 2007 Ernst & Young Entrepreneur of the Year award. The program honors business leaders who have demonstrated excellence and extraordinary success in areas such as innovation, financial performance and personal commitment to their businesses and communities. (See story on page 7).

Russ O’Dell (‘75) received the 2008 Award For Excellence from the College of Engineering in recognition of his outstanding service to the College of Engineering and the university community.

Viney Aneja (PhD ’77) has been awarded the prestigious 2007 North Carolina Award for Science—the highest civilian honor the State can bestow—for his pioneering contributions to environmental science. The award was presented by Governor Mike Easley during a ceremony on November 27, 2007. Viney is a member of the faculty in the Department of Marine, Earth and Atmospheric Sciences at NC State. He has developed a research program in agricultural air quality that is recognized worldwide.

Henry Nicholson (‘78) earned a PhD in Higher Education from the University of North Carolina at Greensboro in 2007.

Randy Perry (‘78, MS ’79) has co-authored a book, “Commercializing Great Products with Design for Six Sigma.” Randy is a consultant in the field of Six Sigma productivity improvement and new product development.

Tom Freshwater (‘80) has taken a job as Physical Plant Director at UNC-Wilmington.

Bob Kelly (PhD ’81) was presented an Alumni Distinguished Graduate Professor Award by the Alumni Association for 2006–2007. Bob is a professor in our department.

Brian Phillips (‘82) won the 2007 Stover Volunteerism Award from Eaton Corporation for his work at The Carying Place, a family homeless prevention program in Cary. The program provides short-term housing and support services while teaching life skills for independent living. Brian is employed by Eaton Corporation in Raleigh as Director of Environmental, Health and Safety.

Med Byrd (‘84) was presented an Alumni Outstanding Teaching Award by the Alumni Association for 2006–2007 and was inducted into the Academy of Outstanding Teachers. Med is a professor in the Department of Wood and Paper Science at NC State.
Jeff Garwood ('84) was named President & CEO of GE Water and Process Technologies.

Leigh Anne Casavant ('85) was promoted to Operations and Results Superintendent at Progress Energy’s Cape Fear Plant in Moncure.

Steve Greer ('85) is back in the US after three years with Procter & Gamble in Puerto Rico. Steve is now working in Cincinnati, OH, as a NA Region QA Manager for Home Care Products.

Theresa Mooney Snyder ('85) made the top 10 in sales for Fisher Scientific.

Lisa Gardner Bullard ('86) has been named a teaching associate professor in our department.

Gary Gilleskie ('86) has joined the Golden LEAF Biomanufacturing Training and Education Center (BTEC) as a teaching associate professor. The BTEC is located on Centennial Campus just north of our department’s home, EBI.

Rebecca “Becky” Lindsey Nicholson ('86) was promoted to director of the Environment, Health and Safety Research Division at RTI International. Becky is responsible for overseeing a multidisciplinary staff of 90 scientists and engineers dedicated to developing and executing environmental analysis and engineering programs for a wide variety of clients.

Helene Gassen Lollis ('87) received the 2007 Guiding Star Award at the Advancing Women Together Conference on October 19, 2007. She currently serves on the boards of Junior Achievement of Georgia, Possible Woman Foundation International and the Metro Atlanta Chamber of Commerce where she chairs the Small to Mid-Sized Business Council as well as the Regional Education Teacher Recruitment/Retention Committee. She is a member of the Leadership Atlanta Class of 2008. Helene is partner and president of Pathbuilders, Inc. in Atlanta, GA.

Brad Lee ('88) has been promoted to President of BREG, the sports medicine subsidiary of Orthofix International in Vista, CA.

Tim Wallace ('89) has taken a job as a Senior Process Engineer with O’Neal Engineering in Morrisville.

Tom Brna ('90) transferred with Merck to the new site in Durham, where he is the Operations Manager.

John Davis ('91) was promoted to Formulation Engineering Group Leader with Syngenta in Greensboro. John and Ana Piqueras Davis ('91) live in Jamestown.

Anita Jones Hilliard ('91) is working from a “virtual office” in her home doing discrete event modeling for Dow Chemical Company. Her husband, Lawrence Hilliard, competed in a singing contest for the 2008 Lilburn Idol title.

John Weidner (PhD ’91) has been selected as the inaugural editor of a new peer-reviewed Electrochemical Society publication, “ECS Transactions.” John is a Professor of Chemical Engineering and Interim Associate Dean for Research at the University of South Carolina.

Bob Amend (MS ’92) was assigned as the plant manager for a 40 million gal/year Biodiesel Plant in Moundville, LA. The plant was commissioned in March 2007.

Tom Hornack ('92) has taken a job with Syngenta in Greensboro as a Process Technology Staff Engineer.

Eric Carlson ('93) was promoted to Vice President of Product Development at Symyx Technologies in Santa Clara, CA.

Susan Bradley ('94) has transferred with ExxonMobil from Beaumont, TX, to Baytown, TX. Susan is a Section Supervisor at the Baytown refinery.

Jay Brown ('94) was elected shareholder at the Akerman Senterfitt law firm (equivalent of making partner) in 2006.

Jason Haugh ('94) received the NC State Alcoa Foundation Engineering Research Achievement Award for 2008. (See story on page 11.)

Dave Sehgal ('94, MS ’99, PhD ’02) has taken a job as Senior Process Engineer with Merck in Durham.

David Wood ('94) earned a PhD from the University of New Mexico in 2007 in conjunction with the Los Alamos National Laboratory. David is working for the Cabot Corporation fuel cell team on Direct Methanol Fuel Cell (DMFC) Membrane Electrode Assembly (MEA) development, DMFC durability testing, automotive electrocatalyst and composite electrode-layer development, novel materials and surface chemistry characterization techniques, and next generation fuel cell component development.
Alumni Notes (continued)

Matt Olson ('98) has joined Syngenta in Greensboro as Supply Chain Manager. Matt earned an MBA from the Wake Forest Babcock Graduate School of Management in May 2008.

Joe Marranca ('99) has taken a job with UNC Energy Services in Chapel Hill.

Jason Cummings ('00) earned a PhD in Chemical Engineering from Princeton University in 2007. He works for IBM in Albany, NY.

Neal Robbins ('01) was graduated from the Wake Forest University School of Law and the Wake Forest Babcock Graduate School of Management on May 21, 2007 earning both a Juris Doctor and MBA. He passed the North Carolina bar exam in July 2007. Neal is employed as an attorney with Carruthers & Roth, P.A. in Greensboro in the areas of banking and corporate finance.

Dipa Shah ('01) earned a PhD in Chemical Engineering from the University of Colorado – Boulder in 2006. Dipa is a Senior Curriculum Research Assistant on the Engineering is Elementary project at the Museum of Science in Boston, MA.

Carl Creel ('02) has taken a job with Qimonda in Sandston, VA.

Bill Ketchie ('02) earned a PhD in chemical engineering from the University of Virginia in May 2007. Bill took a position with UOP in DesPlaines, IL.

Mike Foote ('02) and Katie Wright Foote ('02) have moved to Wilmington. Mike has taken a job with Invista Performance Technologies and Katie has taken a job with Chambers Process Engineering.

George Laniyan ('02) has taken a job with URS Corporation in Baltimore MD., working as a Civil/Environmental Engineer. He is working on rehabilitating and maintaining storm water collection and sanitary sewer systems.

Mark Treece ('02, MS '03) earned a PhD in Chemical Engineering from the University of Virginia in January 2008. He has taken a job with Eastman Chemical Company in Kingsport, TN as an Advanced Research Engineer in Specialty Polymers Applications R&D.

Heath Turner (PhD '02) received a National Science Foundation CAREER Award. Heath is a Reichhold-Shumaker Assistant Professor of Chemical and Biological Engineering at the University of Alabama in Tuscaloosa.

Ahmed Abdala ('03) has accepted a faculty position in the Department of Chemical Engineering at the Petroleum Institute in Abu Dhabi, UAE.

Sabrina Kimrey ('03) earned an MD from the Wake Forest University School of Medicine on May 18, 2008. She will do an internship in Pediatrics at the University of Texas Medical Branch in Austin, TX.

Adande Williams ('03) started A.N.D. Consulting, Inc. in Durham to focus on validation and process engineering consulting services to pharmaceutical and biotechnology companies within the global market. Her company will expand to provide health and educational consulting services.

Coray Colina (PhD '04) has accepted a faculty position in the Department of Materials Science and Engineering at Penn State University in University Park, PA.

Wes Hudson ('04) has been accepted into the MBA program at Virginia Tech starting with the 2008 fall semester.

Lauren Killough Kirkpatrick ('04) will finish an MBA at UNC-Charlotte in December 2008. She is working for the Charlotte-Mecklenburg Utilities Department in Charlotte.

Tom Rajala ('04) has taken a job as a process engineer with DanChem Technologies in Danville, VA. He has been assigned to a plant making high purity lime. Tom is working with another NC State ChE alum, Larry Johnson ('84).

Jebina Rajbhandari ('04) has taken a job with FMC Corporation in Pasadena, TX.

Sandra Chadwick ('05) has entered graduate school at Northeastern University. She is working on a PhD in the Department of Pharmaceutical Sciences.

David Day ('05) has taken a job as a process engineer with SNF Floquip in Riceboro, GA.
Marriages

Greg Hatem ('85) and Samantha Smith, June 21, 2008. Greg is managing partner of Empire Properties in Raleigh.

Veronica Godfrey ('95) and Terry Deak, April 14, 2007. Veronica works for UOP in Chicago, IL in aromatics research and development.

Steve Humphrey ('95) and Laura Beth Hendrix, May 28, 2005. Steve earned an MA in Education from Milligan College in August 2006, and now works as a sixth grade Social Studies and Reading teacher for Sullivan County Schools in Kingsport, TN.

Chris Carter ('97) and Kacie Tartaro, October 8, 2005. Chris earned an MS in Chemical Engineering from the National Technological University in 2004. He works for Milliken Chemical in Inman, SC as a senior product/process engineer.

Laura Edwards ('98) and Jason Johns, August 11, 2007. Laura is a senior development engineer at Dow Chemical in Freeport, TX.


Matt Kalemba ('00) and Pauline Kaiser, September 22, 2007. Matt works for BP at the Whiting Refinery near Chicago, IL.

Ben Ray ('00) and Sarah Waterrose, July 15, 2006. Ben is a manager at Accenture in Charlotte.

Seth Whitaker ('01) and Tyler Ann Schachte, April 29, 2008. Seth is an Associate with Duffy and Young in Charleston, SC.

Tomas Carbonell ('02) and Caitlin Boon (CALS '02), June 9, 2007. Tomas just finished Yale Law School and Caitlin is studying food science at UMass-Amherst.

Andrew King ('02) and Ginny Adams (CALS '03), April 19, 2008. Andrew works for Bass, Nixon & Kennedy Consulting Engineers in Raleigh.

Eric Nordby ('02) and Nicole Portello, June 30, 2007. Eric works for Degussa in Greensboro.

Patricia Ryan ('02) and Dustin Lenz (CNR, '02), were married on May 29, 2004. Patricia is a graduate student in the Department of Food Science at the University of Wisconsin-Madison.
Josh Mangum ('03) and Kimberly Gray, October 13th, 2007. Josh received a PhD in chemical engineering from the University of Florida in 2007. He works for Cree in Durham.

Landis Strader ('03) and Christopher Lee Smith (CE '03), October 6, 2007. Landis works for Progress Energy in Technical Services and Chris works part-time for Ko & Associates and is working on a Master of Divinity at Southeastern Seminary.

Heather Baker ('04) and Alby Rose, on April 14, 2007. Heather works for ExxonMobil in Baytown, TX as a Contact Engineer.

Veronica Brumbaugh ('04) and Brad Safranski (CPE '06), May 20, 2006. Veronica works for International Paper in Glen Burnie, MD.

Allison McGuire ('04) and Robbie Hoke (BME '04), December 31, 2005. Allison is a Mechanical Engineer at Areva NP in Charlotte.

Natalie Scurry ('04) and Willie Alston, Jr., August 8, 2008. Natalie earned a JD degree from Harvard in May 2007 and works for the US Bankruptcy Court for the Northern District of Georgia.

Cindy Hendren ('05) and Josh Manasco (MS '07), October 7, 2006. Cindy works for International Paper in Riegelwood and Josh is a doctoral student at NC State.

Randy Welch ('05) and Caryn Nelson (BSW '05), June 10, 2006. Randy was promoted to Fermentation Department Supervisor at Ajinomoto AminoScience in August, 2007.

Mary Andrews ('06) and Geoffrey Hamrick (MAE '07), September 13, 2008. Mary is employed by ExxonMobil in Fairfax, VA.

Alex Marchut (PhD '06) and Sabrina Tachdjian (PhD '07), August 18, 2007. Alex is working for Bristol-Myers Squibb in New Brunswick, NJ and Sabrina is doing a post-doc at Cornell Medical College in Ithaca, NY.


Sara Welter ('06) and Joshua Abbe (MAE '07), June 3, 2007. Sara is a process engineer with Georgia Pacific in Big Island, VA.

Madeha Baqai ('07) and Shahzad Shah, January 5, 2008. Madeha works for ExxonMobil in Fairfax, VA.

Linda Bruner ('07) and Adam Armitage, May 25, 2007. Linda works for Dow Chemical in Hahnville, LA as a Run Plant Engineer.

Beth Duncan ('07) and Daniel Baucom (MAE '05), June 23, 2007. Beth works for Progress Energy in Raleigh as a PRA associate engineer. Daniel works for Caterpillar in Cary.

Megan Maltais ('07) and Adam Baker (MEAS '07), July 14, 2007. Megan is an environmental engineer with Trinity Consultants in Raleigh.

Thomas Medlin ('07) and Edith Matthews, April 19, 2008. Thomas works for Albemarle Corporation in Orangeburg, SC.

Valeria Mejia ('07) and Halid Kopanski ('08), February 28, 2008. Both Valeria and Halid work for Novartis V&D in Holly Springs.

Renee Mitchell ('08) and Bruce Robinson, May 10, 2008. Renee is employed by the US Patent & Trademark Office in Alexandria, VA.

Michael Weiger (PhD '08) and Kathy Fraley ('07), October 5, 2008. Michael is working as a post-doc at NIST in Gaithersburg, MD.

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**Your Classmates Would Like to Hear From You**

Please send your Alumni Notes to Russ O’Dell at russ_odell@ncsu.edu or Campus Box 7901 NCSU, Raleigh, NC 27695-7901.

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**Department History**

Check out our department history at http://www.che.ncsu.edu/history/

Please contact Russ O’Dell (russ_odell@ncsu.edu) if you have any additions or corrections to the listings of our graduates.
Births

Scott Troutman (‘89) and his wife, Roslyn, announce the birth of a son, Edwards Call Troutman on December 11, 2007.

Kaye Brookshire Ferree (‘92) and her husband, Bob (ME ‘90), announce the birth of a son, Daniel Gray Ferree on March 7, 2006.

Stephanie Schwalm Jacobs (‘93) and her husband, Larry, announce the birth of a son, Lawrence on April 19, 2007. Lawrence joins twin sisters, Paige and Elliot, born on September 16, 2005 and brother, Donovan, born on April 9, 2004. Stephanie and Larry are cardiologists with Cardiology Associates in Annapolis, MD.

Joe Lemanski (‘93) and his wife, Jerri, announce the birth of a daughter, Ava Mae Lemanski, on August 22, 2007. Joe is a construction manager with Greenfire Development in Durham. He earned his certification as a Leadership in Energy and Environmental Design Accredited Professional with the U.S. Green Building Council.

Ed Stubbins (‘93) and his wife, Ashley (TEX ‘93), announce the birth of a son, George Edward Stubbins III in October, 2007. Ed is Director of Alternative Strategies and is responsible for worldwide business development at hedge fund firm Symphony Asset Management in San Francisco, CA.

John O’Quinn (‘96) and his wife, Amy, announce the birth of a daughter, Lydia Whitehurst O’Quinn on December 1, 2007. John is Deputy Associate Attorney General for the US Department of Justice in Washington, DC.

Chris Carter (’97) and Kacie, his wife, announce the birth of a son, Noah Christopher Carter, on January 21, 2007. Chris earned an MS in ChE from the National Technological University in 2004. He works for Milliken Chemical in Inman, SC as a senior product/process engineer.

John Chambard (‘97) and his wife, Trisha, announce the birth of a son, John Anderson “Jack” Chambard, on August 6, 2007. John is a reliability specialist at ExxonMobil in Fairfax, VA.

Erik Shore (‘97) and his wife, Michele, announce the birth of a daughter, Amanda Jocelyn Shore, on August 22, 2006. Amanda joins brother, Luke Anthony Shore, born on April 22, 2004. Erik is a Global Engineering Technology Manager at Rhodia Inc. in Cranbury, NJ.

Chancey Washburn (‘97) and his wife, Moriah, announced the birth of a son, Calvin Davis Hughes Washburn, on November 8, 2004. Chancey opened Washburn Family Dentistry in Cumming, GA in 2001 after earning a degree in dental medicine from the Medical College of Georgia School of Dentistry. In 2007 Chancey received a Fellowship from the Academy of General Dentistry.

Kathie Moell Sturgis (‘98) and her husband, Jason, announce the birth of a daughter, Kasey Jane Sturgis, on June 17, 2007. Kathie is a supervisor at ExxonMobil in Fairfax, VA.

Brian Jones (’00) and Jamie Bushnell Jones (’04) announce the birth of a daughter, Avery Kate Jones, on December 12, 2007. Brian and Jamie both work for ExxonMobil in Beaumont, TX.

Iris Alvarado-Santiago (’01) and her husband, John Heetel, announce the birth of a daughter, Irian Patricia Heetel Alvarado, on June 27, 2008. Iris works for INEOS Silicas in Joliet, IL.

Winston Cockburn (’01) and his wife, Jennifer, announce the birth of a son, Winston Cockburn III, on February 1, 2007. Winston is a supply management specialist at John Deere in Cary.

Michael Gerber (’01) and his wife, Adrea, announce the birth of a daughter, Zoe Abigail Gerber, on May 20, 2008. Michael earned a PhD in Chemical Engineering from Carnegie Mellon in 2006. He is employed by Sun Chemical in Carlstadt, NJ.

Shawn Pace (’01) and Carey Beaver Pace (’01) announce the birth of a daughter, Cora, on June 25, 2008. Shawn works for Eastman Chemical Company in Kingsport, TN.

Emily Lewis Thompson (’02) and Jay Thompson (’03) announce the birth of a son, Jace Ethan Thompson, on February 15, 2008. Emily works for CRB Consulting Engineers in Cary and Jay works for Closure Medical in Raleigh.

Franklin Goldsmith (’03) and his wife, Tania Ralli, announce the birth of a daughter, Sabine Ralli Goldsmith, on July 5, 2008. Franklin is working on his doctoral degree in chemical engineering at MIT.

Tracy Beavers Schoolcraft (’04) and her husband, John, announce the birth of a son, Cayce Scott Schoolcraft, on May 23, 2008. Tracy is a process engineer at Wyeth Vaccines in Sanford.
Haiou Yang (MS ’04) and her husband, Zushou Hu, announce the birth of a son, Hairui Harris Hu, on April 16, 2008. Haiou is a doctoral student in our department.

Young Jhon (MS ’05) and his wife, Ji Young, announce the birth of a daughter, Anna Jhon, on July 8, 2008. Young is a doctoral student in our department.

Don Comfort (PhD ’06) and Kristen Krupa Comfort (PhD ’07) announce the birth of a daughter, Holly Elizabeth Comfort, on December 9, 2007. Don works for Wyeth in Sanford and Kristen has taken a position with Catalent Pharma in RTP as a Senior Technology Engineer.

Shannon Manning (‘07) and his wife, Amy, announce the birth of a son, Harrison Vann Manning on March 20, 2008. Shannon works for Novartis in Holly Springs.

Golden Chain Honor Society

The Golden Chain Honor Society selects up to 12 of the most outstanding rising seniors each year from across the entire student body. The students are chosen on the basis of character, leadership, scholarship and service to the university. More chemical engineering students have been selected over the years than any other department, and four more were added in the past two years as follows:

2007: Lindsey Robinson

2008: Marilynn Angell, Robert Bradley and Esmeralda Luna-Ramos
University Valedictorians

Our department continued its streak of having at least one university valedictorian (4.0 GPA) each year since 1992. No other department can match this feat. Congratulations to the following students on their outstanding accomplishment:

Spring 2007: Corey Allen, Andrew Covington, Brandon Fincher, Kathy Fraley, Mark Hempel, Samia Ilias, Cheng Lu, Megan Maltais, Wes Overton, John Rhoden, Ligaya Roque

Spring 2008: Michael Akerman, Derek Hernandez, Kendall Liner, Abby Lithgo, Lindsey Robinson, Clay Wright

Commencement

We have awarded the following ChE degrees over the past two academic years:

2006–2007: 93 BS (56 with honors), 23 MS, 22 PhD

2007–2008: 89 BS (51 with honors), 13 MS, 14 PhD

This brings the total number of ChE degrees awarded at NC State to 4,405 BS, 538 MS/MChE and 322 PhD.

Frank Culberson ('60) and Ashley Forte ('07) spoke at our May 12, 2007, departmental ceremony. On May 10, 2008 Jeff Garwood ('84) and Lauren Crumpler ('08) spoke at the departmental ceremony.
CBE Alumni Advisory Board

The CBE Alumni Advisory Board meets annually to help promote our department. We thank the following board members for their service to the department:

Jeff Buffo ('85), John Chambard ('97), Norvin Clontz ('65), Ana Davis ('91), John Davis ('91), John Earnhardt ('63), Tommy Gibson ('74), Carlos Gutierrez ('60), Randy Jester ('75), Mike Killian ('68), Mike McLean ('74), Russ O'Dell ('75), Ann Quillian ('86), Jim Smeaton ('66), Allen Tothill ('85), Alan Weinberg ('63), Tamie Wells ('92), Jim Williamson ('85) and Bill Willis ('76).

Engineering Foundation

The Board of Directors of the NC State Engineering Foundation has four members who are chemical engineering alumni. They are Quint Barefoot ('85), Ron Brown ('74), Frank Culberson ('60) and Jeff Garwood ('84). The board works with the Engineering Foundation to promote the College, to increase financial support for the College, and to advocate before the General Assembly.

Schoenborn Award

Our senior graduate students compete annually for the Schoenborn Award by giving an oral presentation of their work to faculty and other graduate students. Congratulations to the most recent Schoenborn Award first place recipients, Julie Crowe Willoughby (2007) and in a tie, Caryn Heldt and Vinnie Verruto (2008). A list of previous award winners can be found on our website at http://www.che.ncsu.edu/history/AIChEAwards.pdf.

CBE Outstanding Seniors

The following CBE Outstanding Seniors were nominated for College of Engineering Awards:

2007: John Rhoden (Scholarly Achievement), Megan Maltais (Leadership), Renee Nobles (Citizenship & Service)

2008: Clay Wright (Scholarly Achievement), Cliff Tse (Leadership), Jessica Lisane (Citizenship & Service), Yorke Reynolds (Humanities)

AIChE Freshman Recognition Award

The Freshman Recognition Award was just created by the AIChE. It is presented to the one National AIChE student member who has been the most active in their student chapter during his/her freshman year. Lane Daley (2007–2008) was selected to receive our inaugural award.

AIChE Othmer Sophomore Academic Excellence Award

Congratulations to the most recent winners of the Donald F. Othmer Sophomore Academic Excellence Award: Courtney Fox (2006–2007) and Jennifer Gowan (2007–2008). This award is presented to the one AIChE student member in each student chapter who has attained the highest scholastic grade-point average during their freshman and sophomore years. Previous winners can be found on our website at http://www.che.ncsu.edu/history/AIChEAwards.pdf.

Most Active AIChE Member

The Most Active AIChE Member Award winners were:

2006–2007: Mike Flickinger

AIChE Student Chapter—National and Regional Conferences

Our AIChE Student Chapter was well represented at the 2007 AIChE National Meeting in Salt Lake City, UT, with 21 students making the trip. Wes Overton ('07), received second place in the national student paper competition. We also came away with two awards in the student poster competition. Troy Gould won second place in Materials Science, and Jake Vestal won third place in Food, Pharmaceutical, and Biotechnology.

We had 20 students in attendance at the 2008 AIChE Southern Regional meeting in Auburn, AL. Jake Vestal received second place in his student paper session. And we are very pleased that our chapter was selected to host the 2010 AIChE Southern Regional Conference. Thanks to Courtney Fox and Jennifer Gowen for putting together the winning bid.

AIChE Student Chapter Officers

Our AIChE Student Chapter continues its tradition of strong leadership. Thanks to the following students for all their efforts: (shown as president, vice-president, treasurer, recording secretary and corresponding secretary, respectively)

2007–08: Mohamed Seyam, Jenn Gilliam, Courtney Fox, Emily Hon, Cliff Tse

2008–09: Cole Garner, Tamara Robertson, Aria Behrouzi, Bridget Hamill, Rachel Hyatt, Peiwen Thor

A list of our AIChE Student Chapter officers going back to 1929 is posted on our history website. Hopefully someone will be able to help us fill in the missing names of the treasurer and secretary for the 1970–71 academic year and the treasurer for the 1955–56 academic year.

Engineers’ Council

Jennifer Gowen, Class of 2010, was elected secretary of the Engineers’ Council for the 2008–2009 academic year. Jennifer served as our department representative for the 2007–2008 academic year.
We’d Like to Hear From You!

Please let us know if your contact information has changed: Send the following information to Russ O’Dell by email to russ_odell@ncsu.edu or by postal mail to Campus Box 7901 NC State University, Raleigh, NC 27695-7901.

Name ___________________________________________ Degree and Class Year ___________________

Home Street ________________________________________________________________________________

City ___________________________________________ State_________ Zip_________

Home E-Mail Address _________________________________________________________________

Home Phone ________________________________ Home Fax_______________________________

Mobile Phone _________________________________________________________________

Company Name ____________________________________________________________________________

Company Street ____________________________________________________________________________

City ___________________________________________ State_________ Zip_________

Company E-Mail Address _________________________________________________________________

Company Phone______________________________ Company Fax______________________________

Department of Chemical and Biomolecular Engineering Administration

Department Head................................................................. Peter Fedkiw

Associate Department Head ................................. Jan Genzer

Director of Undergraduate Studies ......................... Lisa Bullard

Director of Graduate Program .......................... Saad Khan

Director of Graduate Admissions .................. Orlin Velev

Director of Biotechnology Program .................. Bob Kelly

Director of Development ........................................ Russ O’Dell

Director of Director of Golden LEAF Biomanufacturing and Training Center ........ Ruben Carbonell
Contact Information

NC State University
Department of Chemical and Biomolecular Engineering
Campus Box 7905
Engineering Building I
911 Partners Way
Raleigh, NC  27695-7905
Phone:  919.515.2324
Fax:  919.515.3465
www.che.ncsu.edu

Credits

Photography and Illustrations:  Steven Gregory, Jason Haugh, Becky Kirkland, Herman Lankford, Michelle Litvin, NC State News Services, Russ O’Dell, Perkins + Will, Jenny Weston, Roger Winstead.

North Carolina State University is committed to equality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, national origin, religion, sex, sexual orientation, age, or disability. NC State University commits itself to positive action to secure equal opportunity regardless of those characteristics.

4,300 copies of this document were printed at a cost of $4,995.