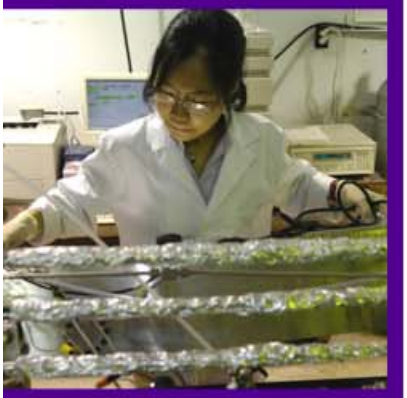
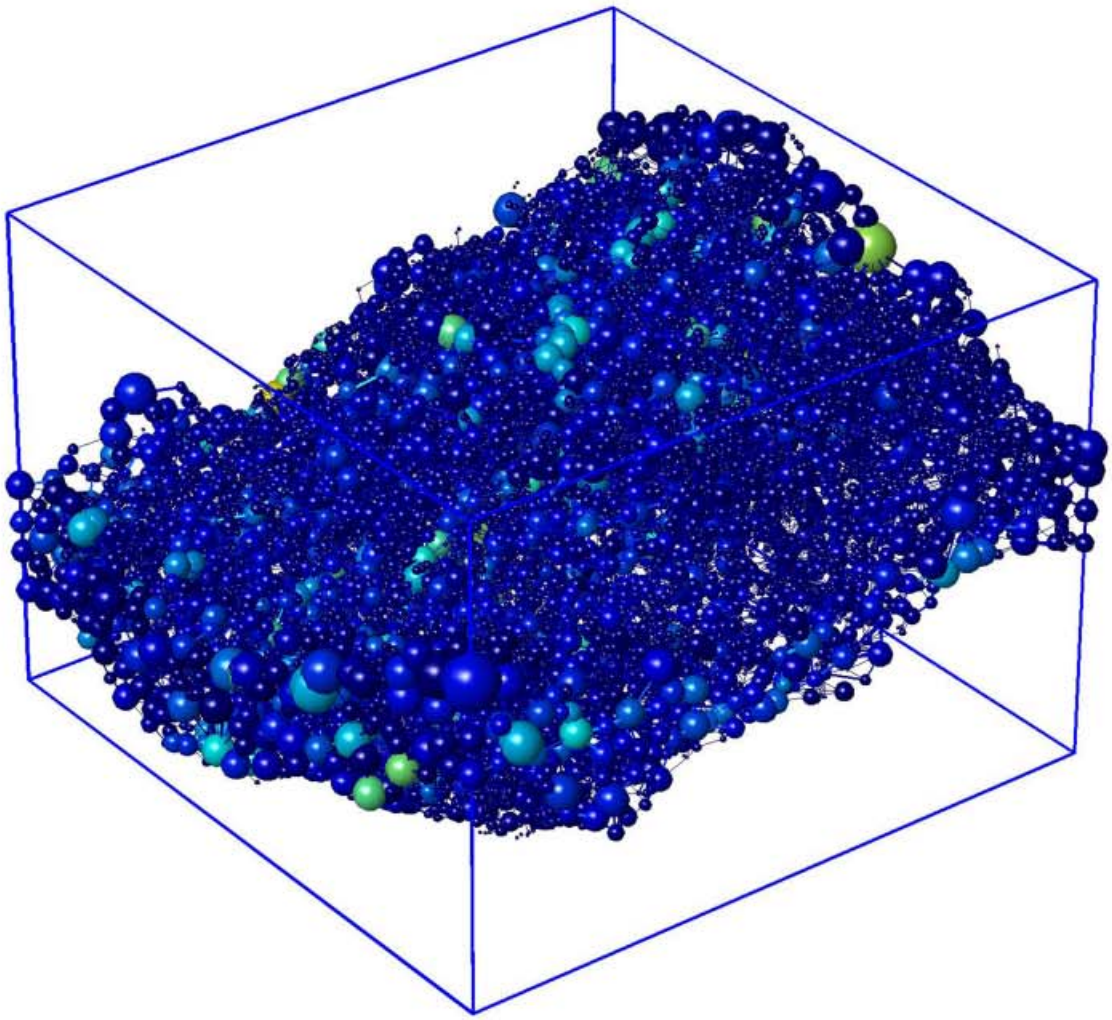
Chemical engineering

Alumni Newsletter
Volume 23
Fall 2006/Spring 2007





Cain Department of Chemical Engineering
LOUISIANA STATE UNIVERSITY

Letter from the Chair

Dear Friends and Alumni:

I am pleased to be able to report several changes that have occurred in the department during this year.

We have two new assistant professors joining us as of Fall 2007: Dr. Michael Benton and Dr. Francisco Hung. Dr. Benton received his Ph.D. from the University of Wisconsin-Madison and works in the area of genomics and bioengineering. Dr. Hung received his Ph.D. from the North Carolina State University and his areas of research are computational modeling and molecular simulations.

The department is continuing to modernize the undergraduate laboratory under the able leadership of Dr. Harry Toups and Professor Jose Romagnoli. Prof. Romagnoli has long-term plans of further modernizing the unit operations laboratory and he would like to request any of our alumni or friends willing to help with this effort to please get in touch with him at jose@lsu.edu.

The faculty and staff in the department met for an annual retreat in April this year and developed future plans for the department. A Strategic Planning Document was prepared and the Departmental Industrial Advisory Committee provided input into this document at its meeting in July 2007. Several of you have willingly provided your time and services to be on the committee and I am thankful for your services.

Most important of all are the developments regarding a new building for the department. Our new building is a very high priority for the University, and it is on the Capitol Outlay plan. A new committee (Ron Cambre (Chair), Vernon Fabre, George Daniels, Al Lopez, Bob Slaven, Dwight Fontaine, Ed Schmitt, Bill Bowdon, and Wayne Turner) is developing plans for fund raising as part of the LSU Forever Capital Campaign. Anyone interested in seeing the new full-scale plans can drop by the department to see the drawings. A sketch of the building can be viewed on the website as well as on the front cover of this issue. We hope that we will witness an enthusiastic response from our friends and alumni. There are numerous opportunities to endow laboratories, offices, and other items in the new building, as outlined on the next few pages. Also in this newsletter there are letters from both Ron Cambre and George Daniels explaining the need for active participation from our friends and alumni in order to reach the campaign goals.

Our alumni and friends have helped us establish several professorships and chairs for the faculty, and scholarships for our students. These efforts have helped us recruit and retain excellent faculty and students to our undergraduate and graduate programs. Our undergraduate curriculum has undergone significant revisions and these can be viewed on our website.

The department will be celebrating its centennial year in Fall 2008 with a two-day event planned for October 23-24, 2008. This event will immediately precede a home football game on October 25, 2008, when the LSU Tigers take on the Georgia Bulldogs. Prof. Kerry Dooley is heading up the effort. He is working on a document recording the Department's first 100 years and he is requesting any relevant photographs, print materials, or other pertinent data be sent to him. He can be reached at dooley@lsu.edu. Please visit our Web site, http://www.che.lsu.edu, for the most up-to-date details concerning the Centennial Celebration. You will be able to view the agenda as it unfolds, register to attend, and view the names of others who have registered to attend.

Included in this newsletter is an alumni questionnaire, which I encourage everyone to return. You may also enter the relevant updated information on our recently redesigned Web site at http://www.che.lsu.edu.

I wish you all the very best for the rest of 2007 and beyond. If you happen to visit Baton Rouge, please stop by the department.

Kalliat T. Valsaraj
Department Chair
Charles & Hilda Roddey Distinguished Professor and
Ike East Professor

A Word of Thanks

Although financial support has been impressive, departmental expenses continue to rise and further renovations are essential if we are to remain competitive with our counterparts at other universities. We would like to thank the following corporations and individuals for their role in maintaining the outstanding reputation that LSU has achieved throughout the years.

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On the Cover

[Top right] From **Karsten Thompson**'s research, this is a network model representation of flow through a propped fracture in an oil-producing rock. Hydraulic fracturing is a technique that is used to improve production rates from oil and gas reservoirs. [Bottom right] This is latest architectural rendering of the new Chemical Engineering building.

Chemical Engineering is published for the benefit of the Cain Department of Chemical Engineering's alumni and students.

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New Chemical Engineering Bui

Chemical Engineering Plays Pivotal Role in FOREVER LSU

by Cathleen Dodge

By the start of 2006-2007 academic year, LSU had just kicked off the second comprehensive capital campaign in its nearly 150-year history. **Forever LSU** aims to raise the profile of LSU to equal and surpass peer institutions nationwide. The College of Engineering is the vanguard of this campaign, and the Cain Department of Chemical Engineering figures prominently in the College's overall strategy for excellence.

The College's goal for the campaign is $100 million, which includes $20 million for Chemical Engineering. This ChE goal is based on raising $15 million for a new building and an additional $5 million for graduate fellowships and distinguished professorships. The ChE goal is the largest among the seven engineering departments.

In its new projected home, the ChE Department will triple its physical space in keeping with the first-class facilities of the University of Mississippi, Auburn, Texas A&M, Georgia Tech and the University of Arkansas. The new building will also ensure that Chemical Engineering at LSU attracts and recruits the best and brightest undergraduate, graduate and postgraduate students as well as faculty. Its features include:

A 4,200-square-foot process control laboratory where undergraduate students can monitor simultaneous experiments and gain hands-on experience with cutting-edge technology in a real-world plant setting

State-of-the-art research laboratories specializing in traditional disciplines as well as in emerging fields like biotechnology, nanotechnology, and alternative fuel development

More, larger laboratories, alongside **new offices** to better accommodate graduate and postgraduate students, faculty and staff

Modern utilities and facilities configured both to safely and effectively manage the electrical, informational, materials/chemical processing and storage needs of the department today, and to expand to meet its needs for tomorrow

In order to accelerate the building process, Chemical Engineering is seeking to raise about $15 million in private funds from alumni, friends, and corporate partners. This goal is roughly half of the building's anticipated cost with the balance being sought through matching funds by the State of Louisiana. Thus, securing legislative and political support of the building project is of equal importance to securing significant private dollars.

Donors who are interested in making an investment in the new ChE building have a number of naming opportunities available to them. With gifts ranging from $20,000 (to name an office) to $20 million (to name the building) individual and corporate donors may recognize themselves or the designee of their choice—such as family members, fellow alumni, former professors or employers. Family gifts and collective gifts among ChE employees at plant facilities and corporations are also becoming popular ways to participate in the building campaign.

For more information on giving opportunities for the new ChE building or for Chemical Engineering program needs, please contact:

Ron Cambre
Chair, Chemical Engineering Campaign Steering Committee
303-837-5970
RonCambre@NewmontMining.com

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Associate Director of Development, Chemical Engineering
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Cathleen Dodge
Director of Development, College of Engineering
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lding - Fund Raising Campaign

Letter from Ron Cambre

For those of us who have had the opportunity to attend the LSU Chemical Engineering program, we share fond memories of that phase of our lives and the benefits received thereafter. Graduation from LSU as a chemical engineer was a life-changing event for all of us.

It is my strong belief that we have an obligation to extend that opportunity to future prospective chemical engineers through the current capital campaign – FOREVER LSU.

This campaign is committed to the replacement of our outdated building which in turn will allow us to attract more and even better faculty, staff and students. It will also enhance our research efforts.

Please remember the value of your education and consider this opportunity to offer that gift to future generations.

R. C. Cambre

Letter from George Daniels

I became aware of the proposal to build a new facility for the Cain Chemical Engineering Department in 2003. I knew a larger facility was much needed. Having an up-to-date facility will allow LSU to continue to provide quality undergraduate and graduate education and research for future chemical engineers; thereby also supporting the chemical industry in Louisiana.

I met with Ed Stiemel and Ed McLaughlin in December 2003. In this meeting I was informed of an alumnus who was making a major donation to start the building campaign. It was at this meeting that I decided to pledge a significant donation myself—$100,000. I thought that a donation early in the campaign of this amount might serve as an example for others to consider making their own gifts.

Having been an Adjunct Professor with the Chemical Engineering Department, I know firsthand the need for a larger facility. I received my Masters in Chemical Engineering from LSU in 1963 and have kept a relationship with the Department faculty members through the local AIChE Chapter and an advisory council member. This factored into making my donation and I am considering additional donations to the FOREVER LSU campaign.

George A. Daniels

Thanks to Our Donors

Since the start of the fund-raising campaign for the new building, the Department has received sizable donations to the New Chemical Engineering Building fund from many of our alumni and friends that have propelled us closer to meeting our goals with the FOREVER LSU Campaign. We would like to extend our most heartfelt thanks to the following alumni and friends for their gracious and generous support:

Jerry Affolter (B.S., 1942)
Robert (B.S., 1948) and Adele Anding
Oscar "Dub" Andras (B.S., 1957)
John W. Barton, Sr. (B.S. in Sugar Engineering, 1939)
Joseph F. Butterworth, Jr. (B.S., 1949)
Ron Cambre (B.S., 1960)
Ernest D. Campbell (B.S., 1949)
George A. Daniels (M.S., 1963)
Mr. & Mrs. Wayne Davis (B.S., 1957; M.S., 1959)
Clarence M. Eidt, Jr. (B.S., 1956; M.S., 1962)
Joseph A. Kleinpeter (B.S., 1965)
Alfredo Lopez (B.S., 1963; M.S., 1965; Ph.D., 1968)
Malcolm C., Jr. (B.S., 1942) and Gene Perdue Lowe
Wayne (B.S., 1975) and Linda Turner
Donald Winkler, M.D. (B.S., 1957; M.S., 1958; Ph.D., 1961)

New Building Naming Opportunities

The Chemical Engineering Building	**$20,000,000**
Location	Amount of Gift
1st Floor Opportunities	
Lobby (includes North & South Entrances)	$1,000,000
Unit Operations & Control Laboratory	$1,000,000
High Bay Laboratory	$500,000
Department Chair Office & Suite	$500,000
Undergraduate Computer Laboratory	$500,000
Machine Shop	$500,000
Courtyard & Garden (South Entrance)	$50,000
2nd Floor Opportunities	
Computer Lab	$500,000
Processing Laboratories (6 opportunities)	$250,000 per laboratory
General Laboratories (13 opportunities)	$100,000 per laboratory
Endowed Chair Offices (2 opportunities)	$100,000 per office
Conference Room	$50,000
Endowed Professor Offices (12 opportunities)	$50,000 per office
Post Doc. Offices (5 opportunities)	$30,000 per office
Graduate Student Offices (10 opportunities)	$20,000 per office
Staff Offices (5 opportunities)	$20,000 per office
IT Manager Office	$20,000
3rd Floor Opportunities	
Conference/Meeting Room	$500,000
Processing Laboratories (6 opportunities)	$250,000 per laboratory
Environmental Prep Laboratory	$150,000
Biotechnology Laboratories (2 opportunities)	$150,000 per laboratory
Endowed Chair Offices (4 opportunities)	$100,000 per office
General Laboratories (8 opportunities)	$100,000 per laboratory
Endowed Professor Offices (12 opportunities)	$50,000 per office
Conference Room	$50,000
Post Doc. Offices (5 opportunities)	$30,000 per office
Graduate Student Offices (11 opportunities)	$20,000 per office
Staff Offices (4 opportunities)	$20,000 per office

Other Program Needs

As part of the LSU Forever Campaign, the Department is trying to raise $5 million to meet other program needs in addition to the $15 million we hope to raise for the new building. The opportunities listed below complement our quest for securing private funds for the new building and will go a long way to strengthening our program, overall:

5 non-endowed Graduate Fellowships for Engineering Excellence to recruit and retain top doctoral students, funded annually for four years for a total donor commitment of $60,000 each (plus $60,000 in department match)

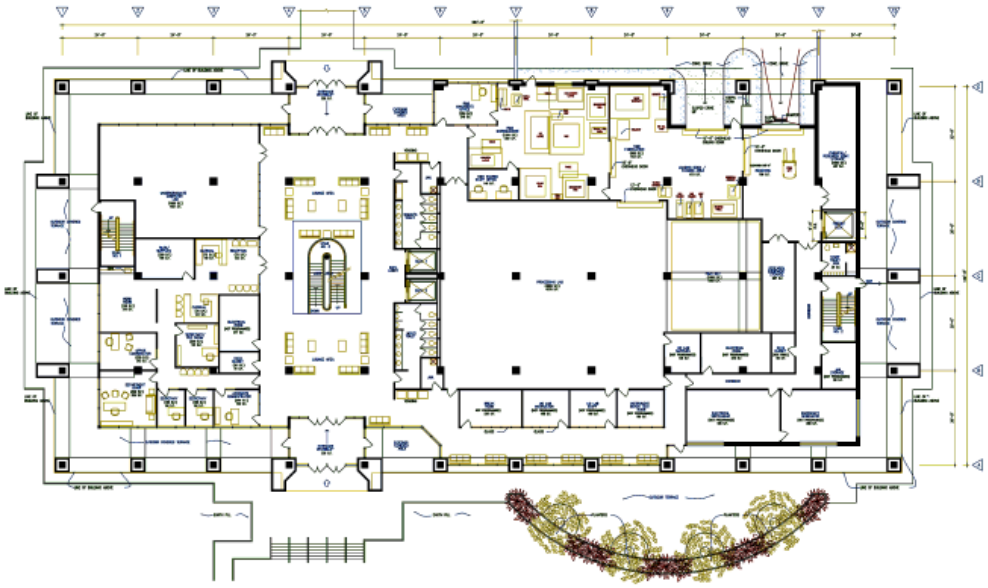
5 Distinguished Professorships at $300,000 each ($180,000 private gift plus $120,000 in state match)

2 endowed Chairs at $2 million each ($1.2 million private gift plus $800,000 in state match)

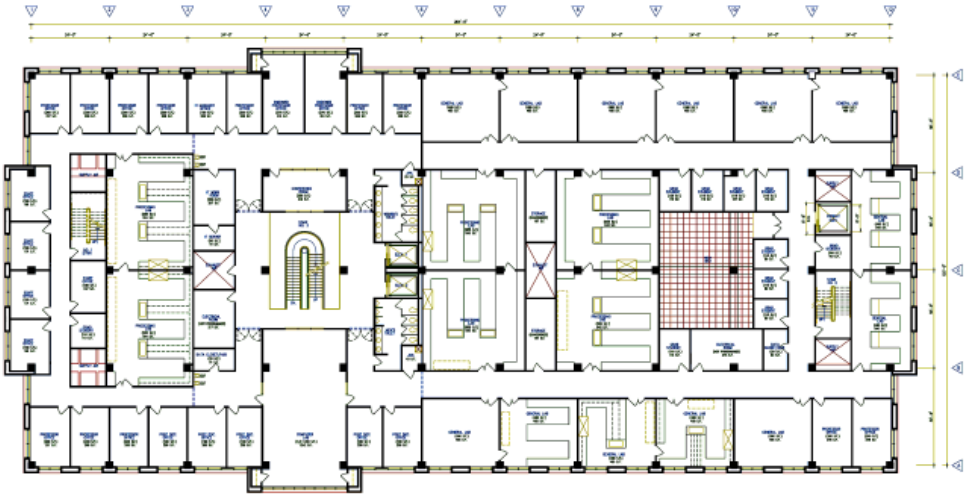
Establish the Chemical Engineering Faculty Investment (Start-up) Fund at $500,000 in order to provide faculty with competitively priced start-up packages

etails and Floor Sketches

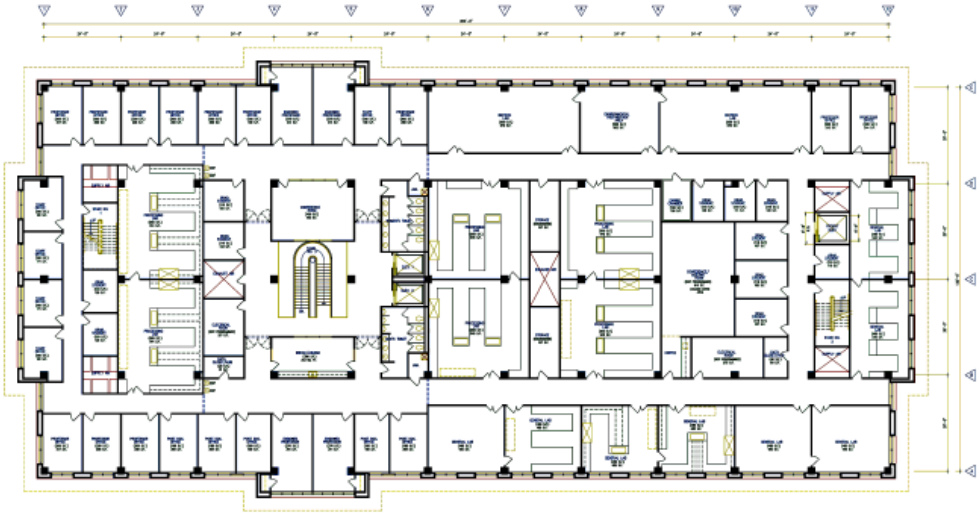
1st Floor



2nd Floor



3rd Floor



Thibodeaux Receives Professionalism Award

Each year the Engineering Faculty Professionalism Award is given to one engineering faculty member in each engineering school in Louisiana with EAC/ABET accredited engineering programs. The objective of this award is to bring to the attention of all faculty at their school, those members who are registered professional engineers; to present registration in a new light which encourages faculty to work toward registration and professionalism; and, to benefit the students and the profession with the promotion of professionalism in the universities.

Louis Thibodeaux, Jesse Coates Professor in Chemical Engineering, is the 2007 LSU recipient of the *Engineering Faculty Professionalism Award*. The award was presented at the Louisiana Engineering Society's Awards Banquet which was held in conjunction with the Joint Engineering Societies Conference, January 17-18, 2007. Thibodeaux had the following to say concerning professional registration as well as winning the award.

> Professional registration for chemical engineers is more than just another line on one's resume. Traditionally, they enjoyed job security without the need for it; in reality it wasn't necessary when working for a big chemical company. Times have changed. Service companies, consulting firms, and private practice value the professional engineer (PE) designation. It is often a requirement for employment for chemical engineers in nontraditional areas and is absolutely necessary if you are self employed. Just do it; get registered.
>
> I am proud being selected as the LSU recipient of the Louisiana Engineering Foundation Faculty Professionalism Award for 2007. My experience with professional engineering registration over the last 40 years reflects the many changes that have occurred for both chemical engineers and College of Engineering faculty members.

While still a graduate student I took the engineer-in-training (EIT) exam. My major Professor Dr. Jesse Coates was a member of the Board of Professional Registration for State of Louisiana; I didn't have a choice but to take it.

While on the engineering faculty at the University of Arkansas, Fayetteville I accumulated enough work experience to become a registered PE in Louisiana. Somehow COE Dean Brannigan learned I was a registered PE and I got the job of grading the chemical engineering section of the Arkansas PE exams assigned to him. He gave me $5 for each one graded. I was the only chemical engineer in the College with a PE.

A PE registration requirement for faculty teaching design and strongly encouraged for all COE faculty members was passed. So, I was required to go to Little Rock, Arkansas and take the written exam, the one I graded many times, plus later stand for an interview before the Board. All-in-all, it was a good experience. I now hold registration in both Louisiana and Arkansas.

On returning to LSU after 17 years at UA the environmental engineering specialty was offered by the Louisiana Board. Although a chemical engineer by training my teaching, research, and service over the years had a very significant environmental chemical engineering component. I was offered and so got grandfathered-in as an environmental engineer.

Yearly renewal of registration is not automatic anymore. Continuing education, ethics training, etc. must be done and cataloged on a yearly basis and documented forms submitted to the Board to gain ongoing registration.

Although I am now categorized as Emeritus with inactive status in Louisiana, I am proud to be a registered PE in both chemical and environmental engineering.

James Henry chaired a session at *Biochemical Engineering XV*, which was held in Quebec City, Canada, July 15-19, 2007. The theme of the conference is "Biochemical Engineering XV: Engineering Biology from Biomolecules to Complex Systems." Henry served as the academic chair for the session entitled, "The Biology-Chemistry Interface: Materials and Bionanotechnology." Each session was chaired by one researcher from academia and at least one researcher from industry.

Ralph Pike was involved in many professional activities during the past academic year. He was appointed to the editorial board of *Clean Technology and Environmental Policy Journal* for the term 2007-2010. He also served in various capacities for the American Institute of Chemical Engineers (AIChE):

- Director, Fuels and Petrochemicals Division
- Director and Programming Chair, Environmental Division
- Education Committee Chair, Sustainable Engineering Forum
- 2006 Annual Meeting, San Francisco, November 12-16:
- Chair, Sustainable Fuels Technical Session (co-chairs: Tomohiko Tagawa and Toshikuni Yonemoto)
- Co-Chair (along with Jack R. Hopper), Developments in Catalysis and Reaction Engineering Poster Session

He was an invited lecturer at Lamar University on April 10, 2007. The lecture was entitled, "Mathematical Programming, On-Line Optimization and Optimization of Multi-Phase Operations."
In addition, he had the following publications and presentations during the academic year:

- A.E. Agboola, R.W. Pike, T.A. Hertwig and Helen H. Lou, Conceptual Design of Carbon Nanotube Processes," *Clean Technology and Environmental Policy*, published on-line, January 10, 2007.
- R.W. Pike, "Process Optimization," *Encyclopedia of Chemical Processing*, Sunggyu Lu, Editor, CRC Press, New York, 2005, Marcel Dekker, New York, published on-line, www.dekker.com/sdek, 2006.
- R.W. Pike, "Greenhouse Gas Management for Multi-Plant Complexes," *Encyclopedia of Chemical Processing*, Sunggyu Lu, Editor, CRC Press, New York, 2005, Marcel Dekker, New York, published on-line, www.dekker.com/sdek, 2006.
- "Environmental Impact Assessment for Potential Continuous Processes for Carbon Nanotubes," with Helen H. Lou, Adedeji E. Agboola, Aditi Singh, Xiang Li, Jack R. Hopper and Carl L. Yaws, Air and Waste Management Association 100th Annual Conference, Pittsburgh, PA, June 26-28, 2007.

Finally, Pike received the following grants:

- Grant (STTR Phase II) from the U.S. Army Space and Missile Defense Command, Redstone Arsenal, Huntsville, Alabama, for additional support of the project "Thermal Decomposer for Peroxide" with Jeffrey Muss and Richard C. Farmer, Sierra Engineering Inc.., Carson City, NV (2007 - $5,648, 2004-06 two year award $255,000).
- Grant from the Petroleum Technology Transfer Council for continued support of the project "Technology Transfer of Research on Sustainable Development in Chemical Processes for Carbon Nanotubes," (2005 - $13,666).

Jose Romagnoli received the *Best Paper Award* at the 50th Anniversary of the International Congress Methodologies For Emerging Technologies In Automation conference held in Rome, Italy, November 13-15, 2006. The paper was entitled, "An Intelligent/Smart Framework for Real-Time Process Monitoring and Supervision," which he co-wrote with former student Bharat Bhushan (University of Sydney, Australia). The paper proposes an integrated framework for real time process monitoring and supervision. It is applied to fault detection and identification. Also, self organizing self clustering network is used for fault diagnosis. A continuous stirred tank reactor process plant is used to check the efficiency of the proposed strategy. The paper was selected based on the following criteria: clear formulation of the addressed problem, correct exploitation of conceptual frameworks and algorithms, applications of theoretical results to relevant industrial automation cases, well-argued explanation of what has been done and why it was worth doing it, clear identification of the proposed approach within a more general scientific world trend. The selection committee further stated that, "the paper deals with extremely interesting and up-to-date technical and scientific problems and shows great potential for possible extensive adoption by the industrial world."

James Spivey has been elected as a Fellow of the Royal Society of Chemistry (Cambridge, UK; www.rsc.org), effective May 18, 2007. One notable achievement as basis for this honor, Spivey has served as Editor of the Society's *Catalysis* book series since 1991, with **Kerry Dooley** co-editing the two most recent volumes.

Kalliat Valsaraj received an Excellence in Review Award from *Environmental Science & Technology (ES&T)*, the number one impact journal with most citations in environmental science and engineering. The editors of ES&T give this award to show appreciation to those reviewers who continuously provide scholarly and timely reviews to the journal. ES&T will publish the award winners in an upcoming edition of the journal.

NEW FACULTY - John Flake

In August 2006, the department welcomed the newest member to the faculty, **John Flake** as Associate Professor and Cain Professor in Chemical Engineering. Flake joined LSU following eight years in industrial R&D labs with Motorola. He received his B.S. from Louisiana Tech University in 1993 and his Ph.D. from the Georgia Institute of Technology in 1999, both in chemical engineering.

Flake's research focuses on processing of electronic materials and thin films processing. Research applications include micro & nanoscale electronics, chemical and bioelectronics, and micropower sources (photovoltaics, fuel cells, and batteries). He has authored ten patents related to thin film transistors and CMOS electronics processing. He has authored more than 10 publications and presented at numerous national conferences.

Since joining the department, Flake was awarded a Research Competitiveness Subprogram grant for his work focusing on silicon nanowire devices. The research has already generated two patent disclosures and is the subject of presentations at the Fall Meeting of the Electrochemical Society. In collaboration with **James Henry**, they have demonstrated that these nanowires may be used as biosensors for detection of ultra-low concentrations of biomolecules associated with diseases such as Alzheimer's, Diabetes or Cancer. Flake hopes to expand his research in advanced materials by leveraging the tools available at LSU, especially the Center for Advanced Microdevices (CAMD) and within the new Interdisciplinary Materials Program.

Furthermore, while attending the recent meeting of The Electrochemical Society (ECS) in Chicago, Flake was nominated and elected to the Technical Affairs Committee. This committee is responsible for the planning of technical symposia and for selecting new symposia topics for the ECS.

Flake and his wife, Shirley, are natives of Louisiana and are happy to return to Baton Rouge with their two daughters, Caroline and Julia. His wife enjoys the year-round gardening and both daughters are already avid Tiger fans. "It's great to be back in Louisiana and to be a part of the LSU family."

ChE Professors Awarded Large Grant

The Department has received an award for a project totaling roughly $2.9 million to study the synthesis of ethanol. The project, supported by the Department of Energy and cost-sharing partner Conoco-Phillips, will focus on catalysts to produce ethanol from coal-derived syngas.

Project PI **Jerry Spivey** and Emeritus Professor **Douglas Harrison** will team with Jim Goodwin (Clemson University), Steve Overbury (Oak Ridge National Laboratory), and engineers from Conoco-Phillips to develop catalysts for this process.

New Undergraduate Scholarship

The Department will benefit from a newly established scholarship – Leo Broering Memorial Scholarship in Chemical Engineering. Leo Raymond "Dutch" Broering was a native of Ohio who received his chemical engineering degree in 1978 from the University of Cincinnati.

Upon graduation, he began working as a process engineer at the Shell Deer Park refinery in Houston. Over the years, he held many positions within Shell. In 1990 he transferred to the Shell Geismar Plant as an expansion superintendent and became site manager of the Shell Chemical facility in Geismar in 1999.

Broering was very active in the community. He served on the board of directors for the Capital Area United Way and was also active in the Louisiana Alliance for Education Reform and the Louisiana Chemical Association. Broering died on January 13, 2004 from an automobile accident at the age of 48. The scholarship was created in his name by his family and friends to honor his memory. The scholarship will be awarded to a full-time undergraduate student majoring in chemical engineering. A preference shall be given to interns or dependents of employees at Shell's Geismar plant. The recipient must have a cumulative GPA of 3.2 or higher. Financial need may also be a consideration.

Department Industrial Advisory Committee

The Departmental Industrial Advisory Committee has been reformed. The first meeting of the new committee occurred on November 11, 2006 with a follow-up meeting on June 20, 2007. The committee serves to provide feedback to the department on our undergraduate and graduate programs and to assist us in shaping our curriculum so that our graduates are better prepared to enter the workforce of our local industrial providers. The committee will also assist in various matters related to the department, such as our current fund-raising campaign for the new Chemical Engineering Building. The current committee members consist of alumni and representatives industry. They are:

Vernon Fabre (Chair) (B.S., 1973)
BASF Corp

David Toups (Vice Chair)
Honeywell

Ronald Cambre (B.S., 1960)
Newmont Mining Corp.

Sharon Hulgan (B.S., 1994)
Dow Chemical

Ronald Rousseau (Ph.D., 1969)
Georgia Tech

Margaret Reaves (B.S., 2002)
Shell Chemical Co.

Karl Anderson (M.S., 1989)
Shell Global Solutions

Claire Cagnolatti (M.S., 1982)
Solomon Associates Inc

Jack Hopper (Ph.D., 1969)
Lamar University

Wyndham Cook
Albemarle

Les Jensen
ProSys, Inc.

Rich Bedell
Marathon Petroleum Co.

Marvin Borgmeyer
ExxonMobil Chemical

Larry Schwartz
Schlumberger

Ed McGinnis, P.E.
Monsanto Co.

Todd Levy (B.S., 1981)
Chevron


IAC in session

Department Retreat


Prof. Armstrong during his dinner talk.

The chemical engineering faculty and staff gathered for their first-ever departmental retreat this year. The retreat was held on April 13-14, 2007, at Carter Plantation located in Springfield, Louisiana. The entire faculty and staff were in attendance as well as the Chair and Vice Chair of the Industrial Advisory Committee. A leadoff presentation ("Frontiers in Chemical Engineering Education") by Prof. Robert Armstrong, Chair of the Department of Chemical Engineering, MIT, led to discussions about the future of our department and the chemical engineering profession, in general. The majority of the faculty sessions took place on Saturday and were capped off with a luncheon seminar by Dan Salvito, Director-Environmental Sciences, Research Institute for Fragrance Materials (RIFM). His lecture was entitled, "Fragrances, RIFM, and their Environmental Assessment."

A departmental Strategic Planning Document was created following the retreat that will assist the department as it strives to meet the future goals it has set. It is a comprehensive document detailing current aspects of all of our programs as well as strategic goals and objectives. This document also received input from the entire Department Industrial Advisory Committee at their most recent meeting. The overall theme of the document is in line with the LSU National Flagship Agenda and seeks to raise both the profile and stature of the department. The department is already well positioned amongst our peer chemical engineering departments to make significant strides in the future.

Nicholas Ashley, a Ph.D. student under the direction of **Kalliat Valsaraj** and **Louis Thibodeaux**, is the recipient of a $2,000 scholarship from the Air & Waste Management Association. He will receive the scholarship for the 2007-08 academic year and it can be used for tuition, fees, student stipends, and other related educational expenses. In addition, he will be receiving a gratis one-year student membership to the Air & Waste Management Association as a way to encourage his participation in the association's activities. The primary goal of the Air & Waste Management Association is to foster educational activities in the areas of air quality, waste management, and environmental management, policy, and law. Mr. Ashley will be recognized by the association in a future issue of their publication as well as at the 100th Annual Conference & Exhibition, to be held in Pittsburgh in June 2007.

Justin Birdwell, a Ph.D. student under the direction of **Louis Thibodeaux**, is the recipient of the *2007 Dow Chemical Award for Excellence in Macromolecular Studies*. He was honored at a ceremony hosted by the Department of Chemistry, which was held at the LSU Faculty Club on May 9. The recipient of this award is selected by the co-Directors of the LSU Macromolecular Studies Group and is approved by the Dean of the Graduate School. The recipient must have a GPA of 3.5 or higher in graduate level coursework and must be a candidate for Ph.D. degree. Additional selection criteria may include: the imagination, resourcefulness and independence displayed by the student during the conduct of his or her research, especially as evidenced by publications and presentations; commitment to any assigned teaching responsibilities; and, the promise of the student for enhancing the capabilities and reputation of the LSU Macromolecular Studies Group.

Maoshi Guan received a $750 travel grant to attend the 2006 Joint International Meeting of The Electrochemical Society held in Cancun, Mexico in the fall of 2006; he was selected for this award by the Electrodeposition Division of The Electrochemical Society. At the conference Guan gave an oral presentation entitled, "Electrodeposition and Electrochemical Etching of Au/CoAu Multilayered Nanowires." In this study, a two-step process was developed for the fabrication of Au/CoAu Nanoscale bamboo-like structures and disk-shaped nanoparticles. These structures and nanoparticles can be useful in the field of biomedical and biotechnological applications. The process is controllable, high-yielding, and simple to carry out. In addition, it uses a non-toxic, benign solution. To the best of the author's knowledge, this is the first time a demonstration of nanowire etching process has been precisely controlled by electrochemical etching. Guan received his M.S. in Chemical Engineering in May 2005 and is now pursuing a Ph.D. in Engineering Science. He is a member of **Elizabeth Podlaha**'s research team.

Katherine Levy, a senior in the chemical engineering program, has been awarded the Southwest Chemical Association Scholarship (SCA) for 2007. This is a onetime $5,000 award given to a student based on academic achievement as well as extracurricular activities. Katherine, along with other winners from our region, will be honored and presented with a check at the SCA's annual banquet to be held in Houston in August.

Judith Udeke, a graduating senior in chemical engineering, was the recipient of the John J. McKetta undergraduate scholarship award. It was presented at the 2006 AIChE Meeting held in San Francisco in November. The award is given by AIChE nationally to one chemical engineering junior or senior who is planning a career in the chemical process industries. The student should have demonstrated leadership or activity in either the school's AIChE Student Chapter or other university sponsored campus activity. Only one nomination is accepted per school annually. Udeke received a certificate and a $5,000 scholarship, which was formally presented during the Student Awards Brunch at the annual student conference.

Jiao Yang has been selected as the Best Dissertation Award recipient for 2007 by the Baton Rouge Chapter of the American Institute of Chemical Engineers (AIChE). Yang received his Ph.D. in December 2006; he studied under the direction of **Martin Hjortsø**. His dissertation was entitled, "A Distribution Kinetics Approach for Polymer Crystallization and Phase Separation." Yang was honored at the annual Coates Banquet, which was held in Baton Rouge on May 23.

Awards

ChE Undergraduate Receives International Honor

Laura Harvey, a graduating senior in chemical engineering, has been selected to participate in the 2007 GACCoM Transatlantic Program for students which will take place for the third time in 2007 and will give 25 selected U.S. students the once-in-a-lifetime opportunity to experience Germany and the German business environment first hand.

The Transatlantic Program stands for projects to provide American citizens with facts on Germany and to bring the two nations closer together. Applicants for the ambassadorship were required to have background knowledge of German (part of the selection process involves an interview in half English and half German) and be involved in completing a technical degree.

Harvey, from St. Francisville, Louisiana, has completed 38 hours of German classes at LSU and a chemical engineering internship with BASF in Ludwigshafen, Germany. The program is financed from European Recovery Programm (ERP) Special Funds provided by the German Federal Ministry of Economics and Technology and is graciously supported by the German American Chamber of Commerce of the Midwest (GACCoM) and additional corporate sponsors. In 1997 the German government initiated the German Program for Transatlantic Encounters financed from the ERP Special Funds. Its purpose is to keep the memory of George C. Marshall alive and foster transatlantic partnership in line with his wishes.

According to the German Ministry the program aims at:

1) projecting a comprehensive picture of Germany, of German culture, and of the German language;
2) promoting contacts, primarily between emerging leaders of the business community;
3) exchanging views on topics of current and future political and economic interest; and
4) strengthening cooperation in the business sector.

All participants will take part in a ten-day fully funded immersion seminar in Berlin, followed by an individual internship in a German company, prearranged by GACCoM and its German partner InWent.

The first part, the immersion seminar, will take place from May 19 to May 29, 2007 in Berlin and includes day trips to Hamburg, Rostock, and Potsdam. Throughout the immersion seminar, the participants will be meeting with government officials, representatives of companies and associations, and fellow students to discuss topics of current and future interest. In addition, the students will participate in a German language and culture course, conducted by Prof. Dr. Kraft of UIC. The course will prepare them for the topics discussed in the first week, help them to adapt to their new surroundings, and give valuable advice for living and working in Germany.

At the end of the immersion seminar the students will start part two of the program and travel to their individual internship locations. The internships will start on June 1, 2007 and last from two to six months. The second part of the program also includes a mid-term seminar for all participants in Cologne, organized by GACCoM's German partner InWent.

All information taken from Transatlantic Program.

Harvey in the mountains of Germany.

Student News

Daira Aragon Mena, a Ph.D. student of **Jose Romagnoli,** presented a paper at the 2006 AIChE Annual Meeting in San Francisco. She presented her paper entitled, "Integrated Operation Support System (IOpSS): the Data Pre-processing and Data Reconciliation Modules," during the session of Computers in Operations and Information Processing. This paper discusses the current developments within a novel environment to performed related model-based activities such as simulation, parameter estimation, data reconciliation, and optimization using a single model representation. In particular, the paper focuses in the modules corresponding to data pre-processing and dynamic data reconciliation. In terms of the former module, this work discusses the implementation of an approach based on the minimum median distance (MMD) for the detection of outliers, and median replacement for their rectification. Furthermore, an extension of this method applied to individual variables was considered. Regarding the data reconciliation module, the error-in-variable method (EVM) was implemented as an important contribution to the environment. Finally, the pre-processed data was used to evaluate the performance of the different outlier detection/cleaning methods in the dynamic EVM data reconciliation. The paper was co-authored by Pablo Rolandi (from PSE Enterprise) and Romagnoli.

Andrew Campos, a Ph.D. student under the supervision of **James Spivey,** presented a paper and poster at the SRI2007 Conference held in Baton Rouge in May. The presentation was titled, "Characterization of Mo additions in iron-based Fischer-Tropsch catalysts using X-ray Absorption Spectroscopy and X-ray

Diffraction." This research looks at secondary metal additions and their affect on bulk iron-based Fischer-Tropsch (FT) catalysts that will ultimately convert gasified biomass and coal into liquid fuels (selectively in the diesel fuel range of C10-C20). This is a collaborative Department of Energy funded project between Clemson University, LSU, and CAMD. Amitava Roy of CAMD is a co-PI on the project along with Spivey. The SRI2007 Conference Proceedings will be published as a special issue of *Nuclear Instruments and Methods in Physics Research, Section A (NIMA)*. Campos' paper has been submitted for publication.

Yogesh Waghmare, A Ph.D. student of **Carl Knopf,** presented a paper at the AIChE Annual meeting in San Francisco in the Fundamental Research in Transport Phenomena III Session. The paper was co-authored with Knopf and Emeritus Professor Richard G. Rice. They also published two papers in the March Issue of AIChE Journal, and Knopf and Rice also presented this work at the Orlando AIChE Meeting in April 2006. The threesome has also submitted for publication in the AIChE Journal the paper: "A new theory to explain transport in pulsed-flow bubble columns: the Bjerknes effect", which is also the title of the San Francisco presentation.

AIChE News

President:	Chris Boudreaux
Vice President:	Laura Harvey
Secretary:	James Michiels
Finance:	Daniel Fortier
Fundraising:	Chris Fussel
Senior Representative:	Jared Fontenot
Junior Representative:	Omkar Namjoshi
Sophomore Representative:	Jasleen Kaur

The LSU Student Chapter of the American Institute of Chemical Engineers (AIChE) received three awards for their car design at the 2007 Southern Regional Conference of AIChE. The conference was held March 30 – April 1 in Columbia, South Carolina.

The team received second place overall for their car design as well as a certificate of excellence for the "Most Spirited" and a certificate of excellence for the "Most Creative Car Design." The car design team earned a $450 cash award for receiving second place in the overall competition.

The car design team will next compete at the national convention, which will be held in Salt Lake City, Utah, November 3-5, 2007. Members of the team as well as the ChE car are pictured below. They are as follows: (Top Left) Timothy LeBlanc, Matthew Stephens, Whitney Amato, Stephanie Peterson, and Tracie Ferguson; (Bottom Left) James Henry-faculty advisor, Zach Scheibal, Tim Krimmel, and Omkar Namjoshi.

2006-07 Departmental Distinguished Seminar Series

D. James Donaldson, Ph.D.
Department of Chemistry, University of Toronto, Toronto, Canada
October 27, 2006
Heterogeneous Atmospheric Chemistry of Some Polycyclic Aromatic Hydrocarbons

Joseph Francisco, Ph.D.
Department of Chemistry, Purdue University, West Lafayette, Indiana
November 10, 2006
Structure and Reactivity of Open-Shell Complexes: New Frontier in Atmospheric Chemistry

Alissa Ah-Hyung Park, Ph.D.
Department of Chemical & Biomolecular Engineering, The Ohio State University
January 16, 2007
Co_2 Mineral Sequestration and Particle Charge Effects in Carbon Energy Conversion Systems

Aditya Bhan, Ph.D.
Department of Chemical Engineering, University of California, Berkeley
January 18, 2007
Kinetics, Mechanism and Site Requirements for Dimethyl Ether Carbonylation on Acidic Zeolites

Francisco Hung, Ph.D.
Department of Chemical and Biological Engineering, University of Wisconsin-Madison
January 23, 2007
Nanoscience of Liquid Crystals and Porous Materials: Insights from Computational Modeling

Elaine T. Hale, Ph.D.
Department of Computational and Applied Mathematics, Rice University
January 25, 2007
Multi-Criteria Robust Design of Chemical Processes

Cynthia Lo, Ph.D.
National Institute of Standards and Technology, Gaithersburg, Maryland
January 30, 2007
Computational and Materials Chemistry for Environmental Applications

John N. Kuhn, Ph.D.
Department of Chemical and Biomolecular Engineering, The Ohio State University
February 1, 2007
Catalytic Phenomena Limiting Solid Oxide Fuel Cell Performance

Timothy Morrow, Ph.D.
Department of Chemical and Biomolecular Engineering, North Carolina State University
February 8, 2007
Bridging the Atomistic-Meso Scales Using Coarse-Grained, Two-Body Effective Potentials: Application to Asymmetric Binary Lennard-Jones Mixtures

Michael Benton, Ph.D.
Department of Chemical and Biological Engineering, University of Wisconsin-Madison
February 13, 2007
Systematic Design of Cell-Based Biosensors for Sensitive and Selective Detection of Genotoxicity

Andreas Heyden, Ph.D.
Department of Chemistry, University of Minnesota
February 15, 2007
Adaptive Partitioning in Multilevel/Multiscale Simulations

Jan Andersson, Ph.D.
Institut fur Anorganische und Analytische Chemie, Westfalische Wilhelms-Universitat Munster, Munster, Germany
February 23, 2007
How to Get the Sulfur out of Petroleum: the Marriage of Chromatography and Mass Spectometry for the Investigation of Heavy Sulfur Compounds

Brent H. Shanks, Ph.D.
Department of Chemical and Biological Engineering, Iowa State University, Ames, Iowa
March 9, 2007
Heterogeneous Catalyst Design for Biorenewable Conversions

Theresa Good, Ph.D.
Chemical and Biochemical Engineering, University of Maryland Baltimore County, Baltimore, Maryland
March 16, 2007
Engineering approaches to the development of therapeutics for treatment of T cell Abnormalities and Alzheimer's diseases

Chunshan Song, Ph.D.
Department of Energy and Geo-Environmental Engineering, The Pennsylvania State University
March 30, 2007
Sulfur-Tolerant Catalysts for Reforming of Liquid Hydrocarbon Fuels for Fuel Cells

2006-07 Scholarship Recipients

Alan M. Raymond Endowed Scholarship in Chemical Engineering
Yen Kim Tina Hoang

Chevron/Texaco Chemical Engineering Scholarship
Matthew J. Stephens

Clara & Frank R. Groves, Sr. Undergraduate Scholarship in Chemical Engineering
Judith A. Udeke

Gerard Family Undergraduate Scholarship in Chemical Engineering
Rebecca K. Ferrell
Jennie Najolia

O. Dewitt Duncan Scholarship in Chemical Engineering
Kevin P. Meyers
Zachary R. Scheibel
Luke J. Stein

Paul M. Horton Memorial Undergraduate Scholarship in Chemical Engineering
Saade A. Bou-Mikael
Ung Kim

Paul N. Howell Memorial Scholarship in Chemical Engineering
Christopher H. Boudreaux

R.L. Hartmann Scholarship in Chemical Engineering
Timothy D. Krimmel

William E. McFatter Undergraduate Scholarship in Chemical Engineering
William T. Bergeron

Summer 2006 Commencement

Bachelor of Science in Chemical Engineering
Charles P. DeLand

Master of Science in Chemical Engineering
Robyn Joy Alcanzare
Donald E. Bailey III
Robert A. Buckley, Jr.
Maria D. Rodriguez Da Silva

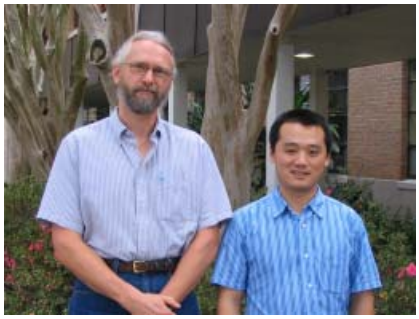
Doctor of Philosophy in Chemical Engineering
Yutong Li

Fall 2006 Commencement

Bachelor of Science in Chemical Engineering
John P. Burris
Darrell L. Moak
Jose L. Portillo

Master of Science in Chemical Engineering
Vinod Kalpathi

Doctor of Philosophy in Chemical Engineering
Young-Pyo Jeon
Alonso Lozano Morales
Jiao Yang
Wenli Zhang


Jiao Yang with his advisor, Martin Hjortso

Wenli Zhang with his Ph.D. advisor, Karsten Thompson

holarships & Awards

Spring 2007 Commencement

Bachelor of Science in Chemical Engineering
Anino E. Adokpaye
Cathlynn K. Allen
Brandon B. Arceneaux
Keyon Azarnia
Brittany L. Black
Christopher H. Boudreaux (*Cum Laude*)
Joshua D. Bozeman
Lam T. Bui
Shelton R. Cabral
Joan A. Cope
Matthew K. Desmond (*Summa Cum Laude*)
Terry P. Dugas
Ryan W. Estevens
Richard C. Green (*Cum Laude*)
Laura L. Harvey
Stephanie M. Hawkins
Dustin J. Hedges
James R. Johnson
Sarah C. Jones
Edgardo E. Kamar (*Cum Laude*)
Juan M. Lopez
Jonathan D. Loubiere
Arthur S. Metcalfe III

James B. Michiels III (*Summa Cum Laude*)
Trung H. Ngo
Eric J. Prejean
Kimberly M. Riley
Keisha R. Ross
Ralph T. P. Rutanhira
Gregory M. Salomon
Sonam D. Sherpa (*Magna Cum Laude*)
Luke J. Stein (*Magna Cum Laude*)
Kimberly G. Thibodeaux
David C. Wascome
William B. Watson
Genti Zylyftari (*Magna Cum Laude*)

Master of Science in Chemical Engineering
Daniel J. Haynes

Doctor of Philosophy in Chemical Engineering
Rohit Mishra
Qingzhong Yuan

Departmental Awards

David Wetzel presents an award to Matthew Desmond.

The following students received departmental awards at the spring 2007 commencement reception:

Jesse Coates Award - James B. Michiels III
High GPA Senior - Matthew K. Desmond
Senior Award (for finishing in 4 years w/ no drops) - Shelton R. Cabral, Edguardo E. Kamar, James B. Michiels III, and Luke J. Stein
American Institute of Chemists Award - Christopher H. Boudreaux

James Michiels III is presented with the Coates Award by Prof. Wetzel.

Ronald Cambre (B.S., 1960) received an Honorary Doctor of Humane Letters Degree from LSU at the May 2007 Commencement ceremony. Mr. Cambre is the former president and CEO of Freeport-McMoRan Resource Partners, chairman of Rio Tinto Minera, and chairman of both Newmont Mining and Newmont Gold. He was honored for his exemplary lifetime achievements; his generous support of LSU, particularly the College of Engineering; and, his dedicated service on numerous LSU boards, including the Chemical Engineering Campaign Steering Committee, the College of Engineering Advisory Council, and the board of directors for the LSU Foundation.

Clinton Dunn (B.S., 1970) has been appointed head of Capitol Bancorp's Texas region. Capitol Bancorp is a $3.7 billion national community bank development company that pursues a strategy of taut economic development and lending ties at the local level in a decentralized banking system. Prior to entering the banking field, Dunn worked for Exxon for 32 years as a process engineer in both Houston and Dallas.

George Newbill (M.S., 1970) is now executive vice president of manufacturing operations at Albemarle Corporation. He oversees all aspects of Albemarle's global manufacturing operations including more than 20 facilities worldwide. Newbill has more than 40 years in the chemical industry.

In Memoriam

We were saddened to learn of the passing of the following alumni. We extend our belated condolences to their families and friends.

Juan Castresana (B.S., 1945)
Josef Jan Cermank (B.S., 1949)
Charles "Chick" Colvin III (B.S., 1955)
F.J. Roussel (B.S., 1960)
Junius Eugene Sapp (B.S., 1937; M.S., 1939)
William L. Schuette (B.S., 1968; M.S., 1972)
David Winkler (B.S., 1957; M.S., 1958; Ph.D., 1961)
Wesley Edgar Young (B.S., 1950)

Alumnus Starts Biodiesel Company

Christian Aucoin (B.S., 2001) and three partners founded a biodiesel company in York, PA – United Biofuels, LLC. The 4 partners designed and built the plant in early 2006, and started production in April, 2006. Currently United Biofuels is producing about 1 million gallons a year of biodiesel from a crude soybean oil feedstock. The 3 partners are Aucoin-COO, John Cole CEO, Edgar Nanne CTO, and Nicholas Kukrika CFO.


Christian Aucoin working on the coalescer

Biodiesel is a renewable fuel made from vegetable oils or animal fats. It can be blended or fully replace diesel fuel in vehicles, burners, and heaters. Biodiesel provides a substantial decrease in greenhouse gas emissions, while providing for improved energy security since it can be grown domestically.

United Biofuels currently provides biodiesel to major fuel distributors on the east coast, as well as to several municipalities in Pennsylvania for their transportation systems and service vehicles. Recently, United Biofuels acquired an equity partner in AgriFuel Co. The partnership will allow United Biofuels to expand production to at least 3 million gallons per year by the end of this year. Also, United Biofuels is leveraging their chemical engineering expertise to develop new technologies in the biodiesel industry. Such technologies have allowed them to reduce their water and energy consumption, sell their by-products as a secondary profit-stream, and to start using unconventional feedstocks.


Benjamin Caire in front of external operations

In order to complete the expansion and take advantage of these new technologies, United Biofuels has hired **Benjamin Caire (B.S., 2005)** to aid in the optimization of the current process and to foster several new innovations into maturity. Prior to joining United Biofuels, Benjamin Caire was a production engineer for Dow Chemical in Pittsburg, CA. Christian Aucoin is also a chemical engineering Ph.D. candidate at Columbia University in New York City and plans to complete his Ph.D. in December of 2008.

s & Updates

If you would like for us to print news of your latest achievements, please complete the short form included in this newsletter and return it to us. Or, you may send us an e-mail at gradcoor@lsu.edu or visit our Alumni Guestbook *on our Web site at http://www.che.lsu.edu. We would love to hear from you!*

1950s

Ezra Jasper Westbrook (M.S., 1955) is CEO of Applied Consulting Technologies, which is a coordinating association of consulting firms and senior level technical consultants.

1970s

Michael John Atchetee (B.S., 1971) joined Cabot Corporation in Franklin, Louisiana on March 1, 1972 and he has been traveling the world with them ever since. He has lived in Spain, Holland, France, and Belgium for 20 years of his career and will retire this year in southern France. He still owns a home in Abbeville, Louisiana, where he will spend winters...during crawfish season, naturally!

Gilberto J. Escobar (M.S., 1971), after working for six years in plastics and as a general manager of a 12,000 ton-a-day sugar mill (along with other interests in real estate and banking), decided to start his own business that he ran for 25 successful years. Now, he is changing his line of business to be more in tune with the new winds blowing west in Latin America. He is married and has raised his children, who often joined him on oceanic racing and flying.

Beth (McKenzie) Hebert (B.S., 1977) was promoted, in June 2006, to Director of Field Environmental Compliance of EPCO, the shared services organization supporting Enterprise Products Operating LP and TEPPCO. She still lives in the Houston area and has worked for Enterprise for the past 14 years. She and her husband, John have an empty nest as of August 29 as their youngest has gone off to Boston University where she has earned a softball scholarship. Their older children have graduated and are working.

Ken Hutchinson (B.S., 1978; M.S., 1981) lives in San Francisco and works for Hewlett-Packard company as a Pre-Sales Systems Engineer. The focus is on selling high end UNIX servers for commercial and scientific applications.

Beth Troxler (B.S., 1979) is currently working at Shell Global Solutions as a senior technologist for Water and Waste Water Treatment.

1980s

Randall Seale (B.S, 1985) is currently employed by NASA. He is part of the Space Shuttle External Tank Launch Integration with Lockheed-Martin at the Michoud Assembly Facility in New Orleans.

1990s

Diane White Doise (B.S., 1993) is currently employed with Valero Energy Corporation in Norco, Louisiana, as a senior process control engineer. She is active with the Society for Women Engineers at both the local and regional levels. She and her husband enjoy travel—their next big trip will be to Egypt this year.

Bill W. Goodwin (B.S., 1992) is currently the vice-president for R&D, Business Development for Penreco (a ConocoPhillips MEZuckerman Partnership), which is located in The Woodlands, Texas. He works in the area of polyphosphazene scale-up and development. He received his MBA from Duke University. Prior to joining Penreco he was the Pharmaceuticals and Fine Chemicals manager for Engelhard, working out of the corporate offices in New Jersey. He is married with two daughters and two dogs.

Phil ip Hadaway (B.S., 1995) is currently working for Shell International Exploration and Production. He, his wife Nicole, and their daughter Phoebe, are based in Monte Carlo, Monaco. Philip is currently working on offshore Brazilian deepwater heavy oil processing facilities and is enjoying his short term assignment with his family on the French Riviera. He is looking forward to returning to the Gulf South and attending LSU football games, but not before Oktoberfest. His e-mail contact is philip.hadaway@shell.com.

Ohseong Tony Kwon (M.S., 1998) is currently working at LG Chem in South Korea as a marketer of LCD-related materials. He misses his old days at LSU.

Adrian Sherrill (B.S., 1996) is presently 1L at the Lewis and Clark Law School located in Portland, Oregon.

Prethi Joshi Sheth (B.S., 1999) is married with two children. She is a certified math teacher, currently working from the home.

2000s

Brandi Bergeron (B.S., 2003) has been employed by CDI Engineering Solutions for two years. Recently, she was promoted to lead process engineer and transferred to Houston. She says she absolutely loves Houston and in her spare time she travels as much as possible. "GEAUX TIGERS!!"

Richard Kyle Cockerham (B.S., 2004) is employed by Engineering & Inspection Services, Murphy Oil USA, Inc. as a project engineer. His interests include hydrocarbon processing, hunting, golfing, and weightlifting.

Liz Deshotel (B.S., 2005) is a process engineer at Motiva Enterprises, Port Arthur Refinery. Motiva is a 50/50 joint venture between Saudi Aramco and Shell. "GEAUX TIGERS!!"

Mike Martinez (B.S., 2005) is the process engineer for power and recovery at Graphic Packaging International in West Monroe, Louisiana. Also, he is a member of the Marine Corps reserves.

Katie Zorzi (B.S., 2001) has worked as a process engineer for Chevron Technology Marketing in Richmond, California, for the past five years doing process design, proposals, and technical service for hydroprocessing clients all over the world. In the course of her technical service work, she has traveled to refineries in Japan, Korea, Italy, Sweden, Poland, Belgium, and Texas. In August 2006, she moved into a marketing position in MolecularDiamond Technologies (part of Chevron Technology Ventures). Their working to commercialize nanoscale diamonds that are found naturally in petroleum products and, also, have the potential to affect multiple industries such as energy, electronics, pharmaceuticals, and even consumer goods.

Celebrating 100 Years of Chemical Engineering at LSU

1908 - 2008

A Centennial Celebration will be held October 23-24, 2008. Everyone is invited to attend the festivities, which will include discussions on the history of the Department and its plans for the future, including the new facility.

Please visit our Web site at www.che.lsu.edu for up-to-date information and on-line registration.

LSU COLLEGE OF ENGINEERING
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Louisiana State University

Baton Rouge, LA 70803

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