Throughout the 20th century, and now well into the 21st, our department has continued to excel at educating students in contemporary chemical engineering practice, not only as skilled technicians, but as leaders and innovators as well. At present, we believe that we are a perfect time to pause and reflect on our 75 years of engineering practice, not only as skilled technicians, but as leaders and innovators as well. Throughout the 20th century, and now well into the 21st, our department has continued to excel at educating students.

Needless to say, there have been significant changes to our core curriculum over the years as our discipline has evolved. A substantial portion of these changes has occurred during the past five years, especially with regard to recent trends in chemical engineering practice which require an additional biological focus over the traditional curriculum. Our department has embraced this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.

The department's research portfolio and productivity has also increased substantially from levels of five years ago. Research funding and expenditures during the preceding five-year period, and the number of graduate students has risen to 43, up significantly (~200%) from its near-term low. Many initiatives are currently underway to expand our elective course offerings, given the recent expansion of our Bachelor of Science in Chemical and Biomolecular Engineering Concentration, and is reflected in this disciplinary evolution through the addition of a Biomolecular Engineering Concentration, and is reflected in our name change to Department of Chemical and Biomolecular Engineering in 2007. Our department's undergraduate curriculum is thus stronger than ever, and currently over 200 undergraduate students are enrolled in our program for the first time in 10 years.
An interview with Dr. John Prados

For over half a century, Dr. John W. Prados has played a significant role in the history of the Department of Chemical and Biomolecular Engineering at the University of Tennessee.

Dr. Prados holds a B.S. in chemical engineering at the University of Mississippi and his M.S. and Ph.D. degrees with majors in chemical engineering at the University of Minnesota.

He began his academic career in the chemical engineering department as a graduate assistant in 1953. Until 1964, the chemical and mechanical engineering departments were housed in Estabrook Hall, and all building that had been built in several stages. Prados’ research laboratory and office were a faculty member were in the “new wing,” which was built in 1964. The oldest part of the building had once been a foundry, and the area served as a base for its high headroom for the unit operations laboratory, which housed a distillation column, spray dryer and other tall equipment. Adjacent to this laboratory was a well-equipped machine shop presided over by H. F. “Chef” Honeycutt, where much of the department’s research equipment was fabricated. Honeycutt would make periodic trips to the government surplus warehouse in Nashville, where needed materials could be obtained at minimal cost.

“When I arrived in 1953, Dr. Boarts, the founding department head, was on leave spending a year in industry with the DuPont Company. Dr. E. Stansbury, a metallurgy professor, served as acting department head that year. The other faculty members were Dr. Harry A. Curtis, the chief chemical engineer at the Tennessee Valley Authority (TVA), prominent among them was my predecessor Jim. He had the reputation of establishing a chemical engineering program from scratch, so when he left to take a new job I was named as acting head. My assistant was a metallurgy professor, who also had a part-time job at the TVA, which was funded by TVA. Dr. Prados recalled. “I began my research in E. Stansbury’s calorimetry laboratory in Estabrook Hall. I recall a well-equipped lecture room, which I was using for my colloidal suspensions research, with support from the Office of Naval Research.”

The department obtained a sophisticated electronic analog computer through an industrial grant, providing support for instruction and research. Research in the chemical engineering program was funded by TVA, including a project on flow visualization under Professor F. N. Peebles with support from the Office of Naval Research.

Dr. Prados left the university in 1969 when he accepted a well-paying job in industry. In his professional career with Fibro, Dr. Prados left his mark on the chemicals industry.

The department obtains a sophisticated electronic analog computer through an industrial grant, providing support for instruction and research. Research in the chemical engineering program was funded by TVA, including a project on flow visualization under Professor F. N. Peebles with support from the Office of Naval Research.
The grounds to give it ‘body.’ Departmental social events, as Eva's across the street under the East stadium stands, ‘great friendships. We brought our lunches every day students formed a close-knit group, leading to many young engineering students.

Prados remembered a wonderful camaraderie among temperature changes. Hence, we were able to use the patterns in polarized light, but were very sensitive to 75 Years of Chemical Engineering at the University of Tennessee.

Laboratory. Chemical and Eastman form, from the DuPont, Dow the present with support in chemical engineering; Dr. E. Spruiell, educated as a metallurgist, but contributing to the polymeric engineering program, is named head of the Department of Materials Science and Engineering.

Dr. Johnson retires and the department is split, with Professor Dougherty to receive a Ph.D. degree in chemical engineering seniors that continues today.

Dr. Prados returns to full-time engineering faculty. Dr. C. F. Moore returns to full-time faculty in polymer engineering and education in the Department of Chemical, Materials, and Polymer Engineering. He believed strongly in the importance of a liberal education for the engineer, and he was unlimited to limit that education to a few electives in the humanities and social sciences.

Dr. Moore returns to full-time new professor in polymer engineering; Dr. John R. Collier succeeds Dr. E. Eugene Stansbury, who in cooperation with professors D. C. Bogue, E. S. Clark, and J. F. Fellers, led the development of a strong program of graduate research and education in polymer engineering.

He was a person with broad interests and vision, who had the ability to recognize and nurture the talent of the faculty he attracted to the department. Dr. Boarts was a brilliant individual and something of a character. He wore ties with unusual colors and abstract designs (all faculty members wore ties in those days).

He was known to students and faculty alike as ‘Pappy,’ who in cooperation with professors D. C. Bogue, E. S. Clark, and J. F. Fellers, led the development of a strong program of graduate research and education in polymer engineering.

He was a founder of the UT chemical engineering department.

He was known to students and faculty alike as ‘Pappy,’ who in cooperation with professors D. C. Bogue, E. S. Clark, and J. F. Fellers, led the development of a strong program of graduate research and education in polymer engineering.

He was a person with broad interests and vision, who had the ability to recognize and nurture the talents of the faculty that he attracted to the department.

He was known to students and faculty alike as ‘Pappy,’ who in cooperation with professors D. C. Bogue, E. S. Clark, and J. F. Fellers, led the development of a strong program of graduate research and education in polymer engineering.

He was known to students and faculty alike as ‘Pappy,’ who in cooperation with professors D. C. Bogue, E. S. Clark, and J. F. Fellers, led the development of a strong program of graduate research and education in polymer engineering.

He was known to students and faculty alike as ‘Pappy,’ who in cooperation with professors D. C. Bogue, E. S. Clark, and J. F. Fellers, led the development of a strong program of graduate research and education in polymer engineering.

He was known to students and faculty alike as ‘Pappy,’ who in cooperation with professors D. C. Bogue, E. S. Clark, and J. F. Fellers, led the development of a strong program of graduate research and education in polymer engineering.
of us from the chemical and mechanical engineering faculties worked on a committee with the university architect, Mr. Malcolm Rice, to plan the building space. The contract was awarded to the Knoxville firm of Johnson and Galyon. In addition, in chemical and mechanical engineering, which moved from Estabrook Hall, the building was named for Dean Nathan W. Dougherty and housed, in addition to chemical and mechanical engineering, which moved from Estabrook Hall, the Department of Nuclear Engineering and the national offices of the Tau Beta Pi engineering honor society, both of which moved from Perkins Hall.

Pridos has played a major role both at UT and nationally in revitalizing and restructuring engineering education. His involvement with the American Institute of Chemical Engineers (AIChE) activities led to work in engineering accreditation through the Engineers’ Council for Professional Development (ECPOD), which later became the current engineering accreditation organization, ABET, Inc.

I served as chair of the ABET Engineering Accreditation Commission in 1984-85 and as president of ABET in 1991-92. These positions gave me the opportunity to observe engineering education at a number of schools, and to interact with the ABET Industry Advisory Board, made up of engineering leaders from industry with a deep interest in engineering education; Pridos commented.

“I became accustomed to the idea that there was a serious disconnect between the kind of engineering education we were providing in most schools and the educational and research needs of our graduates entering engineering practice. Even more disturbing was the observation that we were providing in most schools and the intellectual skills needed by our graduates entering engineering practice. Even more disturbing was the observation that we were providing in most schools and the intellectual skills needed by our graduates entering engineering practice. “It became apparent to me that there was a serious lack of interest in engineering education, ” Prados commented.

I served as chair of the ABET Engineering Accreditation Commission in 1984-85 and as president of ABET in 1991-92. These positions gave me the opportunity to observe engineering education at a number of schools, and to interact with the ABET Industry Advisory Board, made up of engineering leaders from industry with a deep interest in engineering education; Pridos commented.

“I became accustomed to the idea that there was a serious disconnect between the kind of engineering education we were providing in most schools and the educational and research needs of our graduates entering engineering practice. “It became apparent to me that there was a serious lack of interest in engineering education, ” Prados commented.

“The greatest reward a faculty member can have is for you get such a wonderful ‘Thank You!’”

On that same evening, Dr. Bamin Khomami, CBE department head and Granger and Beamann Doctoral University Professor, announced the establishment of the John W. Prados Professorship. The professorship was created by Malcolm Colárdz (BS CBE ’58) and augmented by J. Michael Stone (BS/ChE ’63), both of whom are Pridos’ former students.

“I am deeply grateful to Malcolm Colárdz and Mike Stone for this wonderful contribution to our program. The greatest reward a faculty member can have is for a former student to say ‘thanks, you helped me.’ The establishment of this professorship is by far the most significant thanks that I have ever received!” Prados said. Pridos is still active and enthusiastic, and is very optimistic about the future of the CBE department.

“I have been blessed with good health and a wonderfully supportive family, without both of these I could not have remained active as long I have,” Pridos commented. “I am slowing down now, both physically and professionally, but I still enjoy the opportunity to teach occasionally and to serve from time to time as a consultant to engineering programs preparing for accreditation. Students and younger colleagues keep me from getting too old too fast.”
“My current research interest is to fundamentally understand how the cell metabolism works and rationally design, construct and characterize it as the efficient and robust whole-cell biocatalyst useful for biotechnological applications that help address many key problems that we are facing today related to energy, health and environment.”

Trinh is excited to be a part of a department that has made significant progress in the last few years and continues to move forward.

“I think that the department is growing in the right direction under great leadership and developing one of the strongest education and research programs in the country. The opportunities for research collaboration within the department are great because the faculty’s research expertise is complementary with the areas of interest of the students.

Additionally, Trinh looks forward to finding opportunities to work on joint projects with scholars and researchers at Oak Ridge National Laboratory, particularly in the biofuels research area.

He also plans to enjoy his time in the East Tennessee area. “Outside of work, I like to exercise by jogging and playing table tennis with friends. I also meditate, enjoy food and travel and watch soccer games when I get the chance–but I don’t play,” Trinh added.

Along with his studying, Wang has quite the resume when it comes to work experience. He was employed as a technical service engineer for PVC and plasticizer products for LG Chemical Company and as a research and development (R&D) lab engineer for polyurethane products for BASF.

Wang hopes that resume will pay off as he graduates in August 2011.

“My goals after graduation include becoming a professional R&D engineers,” Wang said. “I think one of the reasons we gain knowledge is to use it. I hope someday I can use my knowledge from UT to change people’s lives and make people live better through technology innovations.”

Wang leaves time for extracurricular activities, too. He said that he was “very lucky to be accepted at UT” because Knoxville is such a great place for outdoor activities.

“Playing soccer with my friends and fishing in the Tennessee River are always lots of fun,” Wang said.

Outstanding Graduate Student: Qifei Wang
Outstanding Undergraduate Student: David Flowers

Flowers, a Mt. Juliet, Tenn. native, is passionate about his major and has thoroughly enjoyed the journey that has brought him to graduation.

His favorite undergraduate class was his honors general chemistry class.

“We had a great group in there,” Flowers said. “We’d get a little crazy at times, but we made a whole lot of fun. I have a lot of memories from that. I made some good friendships.”

Flowers worked with one of his professors, Dr. Tse-Wei Wang, in the Laboratory for Information Technologies (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT), where he used many of the techniques he learned in class. He researched an area called (LIT). He worked with one of his professors, Dr. Tse-Wei

“David has insight into solving problems,” Dr. Wang said. “He is very self-motivated and will try things to verify that his approach is logical and correct. He wants to find out the whys behind things, not just the hows. He is very easy to learn and listened to me when I unveiled black boxes and showed him how things work underneath, or why things are the way they are.”

Flowers said the best part about it all is that he enjoys every bit of his research.

“Outstanding Alumnus: Malcolm Colditz

Malcolm Colditz sees his decision to attend the University of Tennessee as destiny.

“I was accepted to M.I.T. and Georgia Tech,” he said, “however, I had been attending a private high school for four years and my brother was coming along behind me. So I chose the less expensive option at UT and, as it turns out, that was one of the best decisions I’ve ever made. I have never regretted it.”

Colditz was born in Decatur, Alabama. His father was an engineer with TVA, and the family moved frequently during his early years. He grew up in the Fountain City suburb of Knoxville and went to high school at the McCallie School in Chattanooga, Tenn.

Colditz knew from an early age that he wanted to be an engineer.

“For whatever reason, since childhood I was on a course to become an engineer,” Colditz recalled. “This was probably due to both my dad’s influence and also to my favorite uncle. In 1944, he gave me a book titled Descriptive Chemistry and Physics. I still have that book on my shelf.”

Colditz enjoyed his years at UT, enjoying both classes and a full social life that included UT football games, building homecoming floats and other campus activities. He also worked as a co-op student at ORNL.

After receiving his bachelor’s degree in chemical engineering in 1958, Colditz was employed with several divisions of Shell Chemical Company, where he was eventually promoted to Chlorine Plant Manager.

In 1967, Colditz left Shell to construct a specialty chemical plant for an investment group. He also constructed and modified two other plants on a contractual basis.

In 1975, Colditz founded Sea Lion Technology. The company manufactures specialty chemicals and operates contract research and manufacturing for major companies. Sea Lion frequently develops a manufacturing process through the pilot plant phase and then manufactures market-development quantities of the product. Colditz was president of Sea Lion until his retirement in 2002, and he is now a member of its board of directors.

Colditz and his wife, Harriet, have been major benefactors of both the Department of Chemical and Biomolecular Engineering and the College of Engineering. Colditz established the Hugo Colditz Scholarship Endowment in 1990 to honor his father, who received his B.S. in civil engineering from UT in June of 1933. The Colditz family was also instrumental in establishing the Homer Johnson Scholarship Endowment in 1988, which honors Dr. Johnson, who served as professor and head of the Department of Chemical, Metallurgical and Polymer Engineering from 1960 until 1984.

This year, Colditz joined with another chemical engineering alumna, J. Michael Stone (B.S./M.S. 50) to establish the John W. Prados Professorship.

“When we established the Homer Johnson and Hugo Colditz Scholarships, our primary focus was on retaining top-in-state students by providing financial assistance. The need has now shifted toward recruiting and retaining high quality professors. We hope the Prados Professorship will both honor Dr. Prados, one of my former professors, and also achieve the goal of attracting distinguished faculty members,” Colditz said.

Malcolm and Harriet Colditz have been married for 50 years and have three sons, two of whom live in Houston and the third in Dallas. The couple recently relocated to Tennessee from Texas.
Renowned Lecturer: Dr. Lawrence R. Pratt

Dr. Lawrence R. Pratt addressed the importance of modern theory to organize, analyze and interpret the high volume of computational simulation data that can be produced by computational studies of liquids. Super-capacitors address electrical energy storage problems that are expected to become acute. Part of his discussion involved Landau’s remark: "We have not included in this book the various theories of ordinary liquids and of strong solutions, which to us appear neither convincing nor useful."

He discussed what Landau did not know but could have known and what has changed in the generations since Landau’s remark. One of those changes was the emergence of computational molecular simulations as alternative tests for statistical mechanical theories of liquids. The current research progress toward understanding colloidal charged-surface systems based on condensate forests, also known as super-capacitors, manifested his discussion on the current views of the molecular theory of liquids.
The Department of Chemical and Biomolecular Engineering’s Board of Advisors consists of a distinguished group of academics, business professionals and industrial leaders from noted universities and international corporations. The purpose of the board of advisors is to ensure that the department is focused on its mission of education, research and service to the university and technical communities. The board meets once a year to examine and evaluate CBE’s undergraduate and graduate curricula and to advise the department head and faculty with regard to these issues. The board provides insight as to the activities of peer departments at other universities and offers information about the requirements of relevant industries. The board also acts as a liaison between the department and the dean’s office and university administration, providing a candid assessment of the department’s strengths and weaknesses, as well as communicating the department’s directions, goals and resource requirements.

Current members of the CBE Board of Advisors are:

Dr. Victor H. Agreda is the Director of PCI Technology at Eastman Chemical Company in Kingsport, Tenn. Agreda is a member of Tau Beta Pi and the American Institute of Chemical Engineers (AIChE) and is the Chair of the Eastman Acetyl Technology Council.

Dr. George Georgiou is the Joan and Keys Curry/Cullen Trust Endowed Chair and a professor in the Department of Chemical Engineering at the University of Texas-Austin. Georgiou is the recipient of the Marvin J. Johnson Award in Microbial and Biochemical Technology from the American Chemical Society and also received the Professional Progress Award for Outstanding Progress in Chemical Engineering from the American Institute of Chemical Engineers. He also received the University Cooperative Society’s Research Excellence Award for Best Paper at UT-Austin and the E. Bergman Award from the US-Israel Science Foundation.

Mr. James B. Porter Jr. is the former Chief Engineer and Vice-President of Engineering Operations at the DuPont Corporation, headquartered in Wilmington, Del. Porter, a University of Tennessee graduate, is a member of the Construction Industry Institute, the Engineer and Construction Contracting Associates and serves on the Board of Directors of AIChE. He is currently retired.

Dr. Eric Shaqfeh is the Lester Levi Carter Professor of Engineering at Stanford University in Stanford, Calif. He is also the Department Chair of Chemical Engineering and a Professor of Mechanical Engineering. Shaqfeh is a Fellow of the American Physical Society and also received the Bingham Medal from the Society of Rheology, the National Science Foundation Presidential Young Investigator Award, the American Physical Society Frankford Award and the Daniel and Lucie Packard Fellow in Science and Engineering.

Mr. Bruce Combs is the Global Site Logistics Director, Base Plastics, for the Dow Chemical Corporation in Freeport, Texas, Combs, a University of Tennessee chemical engineering graduate, is a past president of the Society of Professional Engineers (SPE), South Texas section.

Mr. James B. Porter Jr. is the former Chief Engineer and Vice-President of Engineering Operations at the DuPont Corporation, headquartered in Wilmington, Del. Porter, a University of Tennessee graduate, is a member of the Construction Industry Institute, the Engineer and Construction Contracting Associates and serves on the Board of Directors of AIChE. He is currently retired.

Dr. Eric Shaqfeh is the Lester Levi Carter Professor of Engineering at Stanford University in Stanford, Calif. He is also the Department Chair of Chemical Engineering and a Professor of Mechanical Engineering. Shaqfeh is a Fellow of the American Physical Society and also received the Bingham Medal from the Society of Rheology, the National Science Foundation Presidential Young Investigator Award, the American Physical Society Frankford Award and the Daniel and Lucie Packard Fellow in Science and Engineering.

MCB Board of Advisors

The Department of Chemical and Biomolecular Engineering’s Board of Advisors consists of a distinguished group of humanities, business, academic and industry leaders from noted universities and international corporations. The purpose of the board of advisors is to ensure that the department is focused on its mission of education, research and service to the university and technical communities. The board meets once a year to examine and evaluate CBE’s undergraduate and graduate curricula and to advise the department head and faculty with regard to these issues. The board provides insight as to the activities of peer departments at other universities and offers information about the requirements of relevant industries. The board also acts as a liaison between the department and the dean’s office and university administration, providing a candid assessment of the department’s strengths and weaknesses, as well as communicating the department’s directions, goals and resource requirements.

Current members of the CBE Board of Advisors are:

Dr. Victor H. Agreda is the Director of PCI Technology at Eastman Chemical Company in Kingsport, Tenn. Agreda is a member of Tau Beta Pi and the American Institute of Chemical Engineers (AIChE) and is the Chair of the Eastman Acetyl Technology Council.

Dr. George Georgiou is the Joan and Keys Curry/Cullen Trust Endowed Chair and a professor in the Department of Chemical Engineering at the University of Texas-Austin. Georgiou is the recipient of the Marvin J. Johnson Award in Microbial and Biochemical Technology from the American Chemical Society and also received the Professional Progress Award for Outstanding Progress in Chemical Engineering from the American Institute of Chemical Engineers. He also received the University Cooperative Society’s Research Excellence Award for Best Paper at UT-Austin and the E. Bergman Award from the US-Israel Science Foundation.

Mr. James B. Porter Jr. is the former Chief Engineer and Vice-President of Engineering Operations at the DuPont Corporation, headquartered in Wilmington, Del. Porter, a University of Tennessee graduate, is a member of the Construction Industry Institute, the Engineer and Construction Contracting Associates and serves on the Board of Directors of AIChE. He is currently retired.

Dr. Eric Shaqfeh is the Lester Levi Carter Professor of Engineering at Stanford University in Stanford, Calif. He is also the Department Chair of Chemical Engineering and a Professor of Mechanical Engineering. Shaqfeh is a Fellow of the American Physical Society and also received the Bingham Medal from the Society of Rheology, the National Science Foundation Presidential Young Investigator Award, the American Physical Society Frankford Award and the Daniel and Lucie Packard Fellow in Science and Engineering.

Mr. Bruce Combs is the Global Site Logistics Director, Base Plastics, for the Dow Chemical Corporation in Freeport, Texas, Combs, a University of Tennessee chemical engineering graduate, is a past president of the Society of Professional Engineers (SPE), South Texas section.

The Department of Chemical and Biomolecular Engineering’s Board of Advisors consists of a distinguished group of humanities, business, academic and industry leaders from noted universities and international corporations. The purpose of the board of advisors is to ensure that the department is focused on its mission of education, research and service to the university and technical communities. The board meets once a year to examine and evaluate CBE’s undergraduate and graduate curricula and to advise the department head and faculty with regard to these issues. The board provides insight as to the activities of peer departments at other universities and offers information about the requirements of relevant industries. The board also acts as a liaison between the department and the dean’s office and university administration, providing a candid assessment of the department’s strengths and weaknesses, as well as communicating the department’s directions, goals and resource requirements.

Current members of the CBE Board of Advisors are:

Dr. Victor H. Agreda is the Director of PCI Technology at Eastman Chemical Company in Kingsport, Tenn. Agreda is a member of Tau Beta Pi and the American Institute of Chemical Engineers (AIChE) and is the Chair of the Eastman Acetyl Technology Council.

Dr. George Georgiou is the Joan and Keys Curry/Cullen Trust Endowed Chair and a professor in the Department of Chemical Engineering at the University of Texas-Austin. Georgiou is the recipient of the Marvin J. Johnson Award in Microbial and Biochemical Technology from the American Chemical Society and also received the Professional Progress Award for Outstanding Progress in Chemical Engineering from the American Institute of Chemical Engineers. He also received the University Cooperative Society’s Research Excellence Award for Best Paper at UT-Austin and the E. Bergman Award from the US-Israel Science Foundation.

Mr. James B. Porter Jr. is the former Chief Engineer and Vice-President of Engineering Operations at the DuPont Corporation, headquartered in Wilmington, Del. Porter, a University of Tennessee graduate, is a member of the Construction Industry Institute, the Engineer and Construction Contracting Associates and serves on the Board of Directors of AIChE. He is currently retired.

Dr. Eric Shaqfeh is the Lester Levi Carter Professor of Engineering at Stanford University in Stanford, Calif. He is also the Department Chair of Chemical Engineering and a Professor of Mechanical Engineering. Shaqfeh is a Fellow of the American Physical Society and also received the Bingham Medal from the Society of Rheology, the National Science Foundation Presidential Young Investigator Award, the American Physical Society Frankford Award and the Daniel and Lucie Packard Fellow in Science and Engineering.

Mr. Bruce Combs is the Global Site Logistics Director, Base Plastics, for the Dow Chemical Corporation in Freeport, Texas, Combs, a University of Tennessee chemical engineering graduate, is a past president of the Society of Professional Engineers (SPE), South Texas section.

The Department of Chemical and Biomolecular Engineering’s Board of Advisors consists of a distinguished group of humanities, business, academic and industry leaders from noted universities and international corporations. The purpose of the board of advisors is to ensure that the department is focused on its mission of education, research and service to the university and technical communities. The board meets once a year to examine and evaluate CBE’s undergraduate and graduate curricula and to advise the department head and faculty with regard to these issues. The board provides insight as to the activities of peer departments at other universities and offers information about the requirements of relevant industries. The board also acts as a liaison between the department and the dean’s office and university administration, providing a candid assessment of the department’s strengths and weaknesses, as well as communicating the department’s directions, goals and resource requirements.

Current members of the CBE Board of Advisors are:

Dr. Victor H. Agreda is the Director of PCI Technology at Eastman Chemical Company in Kingsport, Tenn. Agreda is a member of Tau Beta Pi and the American Institute of Chemical Engineers (AIChE) and is the Chair of the Eastman Acetyl Technology Council.

Dr. George Georgiou is the Joan and Keys Curry/Cullen Trust Endowed Chair and a professor in the Department of Chemical Engineering at the University of Texas-Austin. Georgiou is the recipient of the Marvin J. Johnson Award in Microbial and Biochemical Technology from the American Chemical Society and also received the Professional Progress Award for Outstanding Progress in Chemical Engineering from the American Institute of Chemical Engineers. He also received the University Cooperative Society’s Research Excellence Award for Best Paper at UT-Austin and the E. Bergman Award from the US-Israel Science Foundation.

Mr. James B. Porter Jr. is the former Chief Engineer and Vice-President of Engineering Operations at the DuPont Corporation, headquartered in Wilmington, Del. Porter, a University of Tennessee graduate, is a member of the Construction Industry Institute, the Engineer and Construction Contracting Associates and serves on the Board of Directors of AIChE. He is currently retired.

Dr. Eric Shaqfeh is the Lester Levi Carter Professor of Engineering at Stanford University in Stanford, Calif. He is also the Department Chair of Chemical Engineering and a Professor of Mechanical Engineering. Shaqfeh is a Fellow of the American Physical Society and also received the Bingham Medal from the Society of Rheology, the National Science Foundation Presidential Young Investigator Award, the American Physical Society Frankford Award and the Daniel and Lucie Packard Fellow in Science and Engineering.

Mr. Bruce Combs is the Global Site Logistics Director, Base Plastics, for the Dow Chemical Corporation in Freeport, Texas, Combs, a University of Tennessee chemical engineering graduate, is a past president of the Society of Professional Engineers (SPE), South Texas section.
Enhanced visible light absorption in thin film multicrystalline Si incorporated with Dodecaine via molecular dynamics simulations, B. Khomami, S. Cui, Battelle Minnesota, October, (2009).


* Nanosecond Laser-Induced Dewetting of Nanoparticles, P. Frymier, Oak Ridge National Laboratory, Tennessee, April, (2008).


2.4 Simulations, B. Khomami, S. Cui, AIChE Annual Meeting, Nashville, Tennessee, November, (2009).


1.2 * Nonlinear Pattern Formation and Energy Transfer Driven Self Organization of Hybrid Nanosystems, A. Paradies, Argonne National Laboratory, October, (2009).


0.8 * Nonlinear Pattern Formation and Energy Transfer Driven Self-organization: A unified computational, nonlinear, and experimental study of the optical properties of Hybrid Nanosystems, A. Paradies, Argonne National Laboratory, October, (2009).

0.7 * Nonlinear Pattern Formation and Energy Transfer Driven Self-organization: A unified computational, nonlinear, and experimental study of the optical properties of Hybrid Nanosystems, A. Paradies, Argonne National Laboratory, October, (2009).

0.6 * Nonlinear Pattern Formation and Energy Transfer Driven Self-organization: A unified computational, nonlinear, and experimental study of the optical properties of Hybrid Nanosystems, A. Paradies, Argonne National Laboratory, October, (2009).

0.5 * Nonlinear Pattern Formation and Energy Transfer Driven Self-organization: A unified computational, nonlinear, and experimental study of the optical properties of Hybrid Nanosystems, A. Paradies, Argonne National Laboratory, October, (2009).

0.4 * Nonlinear Pattern Formation and Energy Transfer Driven Self-organization: A unified computational, nonlinear, and experimental study of the optical properties of Hybrid Nanosystems, A. Paradies, Argonne National Laboratory, October, (2009).

0.3 * Nonlinear Pattern Formation and Energy Transfer Driven Self-organization: A unified computational, nonlinear, and experimental study of the optical properties of Hybrid Nanosystems, A. Paradies, Argonne National Laboratory, October, (2009).

0.2 * Nonlinear Pattern Formation and Energy Transfer Driven Self-organization: A unified computational, nonlinear, and experimental study of the optical properties of Hybrid Nanosystems, A. Paradies, Argonne National Laboratory, October, (2009).


CBE Donors for Fiscal Year 2010

Mr. Dennis A. Denihan and Mrs. Constance S. Denihan
Mr. David A. Boshers and Mrs. Tammy Lynn Boshers
Mr. Charles D. Hendrix and Ms. Ruth Borders
Mr. Mark J. Bendele
Mr. William Benjamin Luttrell and Mrs. Joy Luttrell
Mr. Patrick T. Bowland
Mr. Virginia C. Butler
Mr. Mark A. Templeton and Mrs. Patricia C. Templeton
Mr. Dr. Craig A. Hoyme and Ms. Debra P. Hoyme
Mr. John H. E. Stelling, III, P.E.
Mr. Lawrence S. Hood
Dr. Frank S. Riordan, Jr.
Dr. James F. Marlow and Mrs. Lynn Marlow
Mr. Warren Everett Medley
Mr. William Luke Johnson
Mr. Dr. Michael Stone
Mr. William T. Hall and Mrs. Linda Hall
Mr. Mr. William K. Johnson
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Philip Wiseman
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Mr. Mr. William G. Worthen
Mr. Mr. Charles F. Wright
Mr. Ms. Virginia C. Butler
Mr. Mr. Frank Watkins, Jr.
Philanthropy in Chemical and Biomolecular Engineering: 75 Years of Giving

Individual Giving

Kenneth M. Elliott (BS/ChE, 1942) (Retired), ExxonMobil and Virginia Elliott established the Kenneth M. Elliott Chemical Engineering Scholarship. The award is given annually to a student in the department that best exemplifies the qualities of an excellent academic new student.

J. Michael Stone (BS/ChE, 1965) (Owner, Dean & Co. LLC) established the J. Michael Stone Scholarship Endowment in Engineering. Mr. Stone has been a steadfast partner and has provided support for research and student aid such as the Eastman Chemical Engineering Internship and the Eastman Award for Excellence in Chemical Engineering.

Dennis A. Denihan (BS/ChE, 1970) (Retired, Chevron Texas and Racine Felicities Petroleum) and Constance S. Denihan (SM/ChE, 1974) (President, Sustainable Operation Inc.) co-created the John Prados Professorship along with Malcolm H. Colditz (Owner, Sea Lion, Inc.) to ensure our growth and success. But the legacy on Dr. Prados will be passed on to future generations of engineers.

Article by Brian Shupe, College of Engineering Development Director

It is important to realize that every gift provides more than financial support for our department. Throughout the last 75 years people have continued to give to the Department of Chemical and Biomolecular Engineering at UT for many reasons. They give because they believe an investment in our students and faculty is an investment in the future or because they receive scholarship support and want to pay that generosity forward. People give because they experienced financial hardship when they were students and want to use their resources to help the newest generation of UT engineers. People give because they believe an investment in engineering education will provide more than financial support for students majoring in chemical engineering and is named for her late husband James F. Uley (BS/ChE, 1950) (Plant Manager, Olm Corporation).

Dr. John W. Prados (PhD/Chem, 1957) (Professor Emeritus, UT) and Lynn B. Prados have supported the John Prados Professorship along with Malcolm H. Colditz (Owner, Sea Lion, Inc.) and helped build what is now the Department of Chemical and Biomolecular Engineering at UT.

Over the last 75 years, many corporations have given to the UT Department of Chemical and Biomolecular Engineering and provided scholarships and research allows us to produce great engineers like Bruce Combs who is Dow's Global Site Logistics Director for Base Plastics in Freeport, Texas. Mr. Combs is a 1984 UT graduate in chemical engineering. ExxonMobil has been a strong supporter through grants for student projects and faculty funding and research. Nathan Keesecker, a 1998 graduate in chemical engineering, spearheads ExxonMobil’s support to engineering education at the University of Tennessee and other institutions.

Other corporate partners through the past 75 years include such trailblazers as Proctor & Gamble, Rohm & Haas, Shell Oil Company and Texas Instruments.

As the giving profiles of the alumni and friends previously mentioned illustrate, we have a strong tradition of giving that has become leaders in their fields and who have a passion for helping to support the legacy on our department. As alumni and friends, you can give back for our continued progress to begin the next 75 years, call 865-974-2779 or log on to www.engr.utk.edu/giving.

THE UNIVERSITY OF TENNESSEE COLLEGE OF ENGINEERING

DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING 2010 ANNUAL REPORT
CBE Financial Information for Fiscal Year 2010

Total Income/Revenue for FY 2010
$6.7 Million

- State E&G Budget: $1,065,916 (8.3%)
- Gifts, Grants and Contracts: $2,792,542 (41.7%)
- Educational and General Income Revenue for FY 2010: $3.91 Million
  - New Faculty Startup Funds: $1,036,177
- Gifts & Pledges for FY 2010
  - Pledges: $1,855,428 (47.7%)
  - Gifts: $44,549 (2.3%)

Gifts, Grants and Contract Expenditures for FY 2010
$2.79 Million

- Salaries & Benefits: $1,260,245
- Facilities & Administration: $336,178
- Equipment: $138,882
- New Faculty Startup Funds: $1,036,177
- Engineering Course Fees: $95,395
- Other Non-Recurring E&G Funds: $857,459
- Tuition, Scholarships & Fellowships: $316,814
- Other University Accounts: $636,792
- Operating Expenses: $103,604
- Research Incentive Funds: $111,095
- Other University Accounts: $636,792
- State E&G Budget: $1,760,995
- Facilities & Administration: $336,178
- Other Non-Recurring E&G Funds: $857,459
- Tuition, Scholarships & Fellowships: $316,814
- Other University Accounts: $636,792
- Engineering Course Fees: $95,395
- Research Incentive Funds: $111,095
- Summer School Funds: $587,459
- New Faculty Startup Funds: $1,036,177
- State E&G Budget: $1,760,995
- Pledges: $1,855,428 (47.7%)
- Gifts: $44,549 (2.3%)

Gifts
- Pledges: $1,855,428 (47.7%)
- Gifts: $44,549 (2.3%)