Women in Engineering

THE EARLY YEARS

“The only flower amongst the weeds; In the chemical laboratory she’ll perform great deeds.” Miss Teberne deserves a lot of credit and praise for having completed the chemical engineering course. She is one of the very few women who accomplished this.” This inscription appears below Helen Olga Teberne’s name in the 1922 issue of Jambalaya. Miss Teberne holds the distinct honor of having been the first female graduate of the school of engineering, graduating that year in chemical engineering.

It appeared that women were drawn to chemical engineering as the first four graduates studied in that field until 1945 when Helen Mae Dowling (Mrs. Harry T. Bourgeois) became the first female graduate in electrical engineering. She entered Tulane at the age of 16 upon the advice of her high school counselor who suggested she go into electrical engineering because she was a math wizard. At that time the ROTC curriculum was classes year round to finish up early and produce navy officers for the war efforts. Mrs. Bourgeois took the same load as these men, graduating at the ripe old age of 19 years and 10 days with a dual degree in math and engineering. She was awarded the prestigious “Glendy Burke Math Award.”

After college Mrs. Bourgeois applied for a job at the telephone company as an engineer but was refused that position and instead offered one as a secretary because she was a woman. She did find work in her field with a small New Orleans mechanical engineering firm and worked there until she was married in 1947. When her husband finished his schooling, after having served in World War II, her career moves were due to his transfers.

Mrs. Bourgeois’ last job before retirement was teaching math at Richland College in Dallas, Texas. She and her husband still live there and due to her failing health, Mr. Bourgeois was kind enough to share this information with us.

The next two decades reveal a few women enrolled in the school until the first big influx in the early 70’s. In the Fall 1974 freshman class there were 27 incoming women and several female transfer students. The school found itself with 15% of its first year class and 43 (over 8%) of the undergraduate students of

IN HER OWN WORDS

(Mrs. Clara Bennett Heath, Che’46, was the fourth woman to graduate from Tulane School of Engineering. She resides in Tomball, Texas with her husband, James L. Heath, Jr. JD’50.)

Tulane engineering was very unique. On at least two occasions during employment interviews prospective employers expressed surprise that Tulane admitted women engineering students so early.

I began my freshman year with three other women and the first V-12 (program that paid tuition and living costs for sailors) students in July 1943. Most of us were only 17 years old. Having a sincere desire to learn we paid great attention to our studies but made sure also to have a good time. The required course load was 30 hours and that year’s studies were easy for us.

Being female in a male dominated school was interesting and fun, despite the frightening wartime in which we lived. A number of circumstances helped me feel comfortable at Tulane: the continuous professionalism of the professors, the interest professors expressed in their students, and the gentlemanly behavior displayed by male students. I tremendously enjoyed the studies and easy friendships made with fellow students.

School became more serious in March 1944 when sophomore year began. The three women who had entered engineering with me had left; chemical engineering class load increased to 21 hours per semester; a couple of instructors weren’t happy with my presence (though did treat me fairly); and overwhelmingly the war worried us more. Many V-12 and ROTC students had been commissioned and were sent to active duty at the end of their junior year. The wartime circumstances forced us to grow up in a hurry. Due to insufficient high school background several courses gave me severe problems that I was able to solve with a combination of midnight oil and coffee – and much studying. Because I was one of very few civilians available, I became an assistant for Dr. Horton’s organic chemistry lab.

Junior year consisted of two more 21 hour semesters which were easier since I had learned to study. I continued as a lab assistant. Fewer and fewer of the original V-12 and ROTC students remained but fleet veterans began to arrive on campus. These men
A Message from the Dean

You will soon be receiving in the mail an appeal to invest in the future of your School of Engineering. This will mark the beginning of a capital campaign aimed at raising at least $50 million dollars by the year 2007 in order to ensure that the Tulane School of Engineering can address its academic priorities and realize its vision to be universally recognized as one of the premier engineering schools in the nation. All of the funds that are raised will be targeted directly to the School of Engineering and will be used for capitalization of the School and its individual departments, enlargement and improvement of the School’s infrastructure, and strategic investments in areas of existing and potential strength.

As many of you know, the faculty of the School of Engineering approved a new mission statement this past year. We have articulated our mission as follows: “to provide outstanding opportunities for learning and discovery in engineering and computer science and to foster an environment that is student focused, research intensive, entrepreneurial, and responsive to the needs of the community.” Note that our emphasis is on outcomes (learning and discovery) rather than the processes that are employed to achieve those outcomes (teaching and research). As I outlined in my Spring 2001 “Message from the Dean,” our ABET accreditation process is now outcomes-oriented and we have broadened that approach beyond the design and evaluation of our academic programs to all other aspects of our mission.

It should surprise no one that we describe ourselves as student focused. Our undergraduate and graduate students are the reason we are here and they are also our most important product. Our cutting-edge research provides the scholarly environment in which these students learn and discover. This research advances our disciplines, enriches our curricula, and makes us a vital resource to our community and to society. Research at Tulane is both curiosity-driven and market-driven. Our students must understand the relationship between technical innovation and the economy, and our faculty must be assisted in commercialization of intellectual property when that is appropriate. We must maintain a strong partnership with industry and we must extend the opportunities for learning and discovery to our community through continuing education and technology transfer.

To fulfill our mission and to achieve our vision, we have set as our academic priorities the establishment of centers of excellence in targeted areas; continuous improvement of our ABET-accredited undergraduate programs; strengthening and diversification of our graduate programs; and introduction of entrepreneurship into the curriculum and increasing entrepreneurial activity by faculty researchers. So when you receive our capital campaign appeal, please give it your full consideration. As I have said before, we need the help of loyal alumni, friends, and corporate partners such as you to take Tulane Engineering to new heights.

Nicholas Allocco

The Early Years (continued from page 1)

The fair sex. These enrollments represented some of the largest female representations in the country. Dean Hulbert had his picture taken with each female and the public relations office sent copies to each one’s high school and hometown newspaper. Today there are 732 students enrolled in the undergraduate program in the School of Engineering and 186 are women.

Helen Mae Dowling Bourgeois (EE’45)

Comments to this article are welcome. Please get in touch with Barbara Hogue if you have anything to contribute on this topic or if you find discrepancies in facts. We can include them in future issues of the newsletter. She can be reached in the Dean’s office (504) 865-5764 or bhogue@tulane.edu.

1 The Tulane Engineer, Society of Tulane Engineers, Fall, 1974

In Her Own Words (continued from page 1)

I was flattered to have been nominated for St. Patrick Queen in 1945. I think the other nominees were girlfriends of engineering students. I was elected to the court.

During my senior year the first semester began on July 1, 1945, and there were only two students in chemical engineering. Bob Pierpont (ChE’46) and myself. The war had ended before the second semester had begun and two other students were added during second semester. Mrs. Alymer White Barnes (ChE’47), a returning student; and Jim Kotch (ChE’47) returning from the Navy. The department adjusted the schedule so that the additional students reversed their senior year courses and were to take the first semester courses the second semester. Bob and I graduated in February 1946, 32 months after starting.

I was unable to fulfill my dream of becoming a process engineer upon graduation because of the attitude toward women in engineering at that time, and because at the end of WWII many fortunate servicemen returned home to their pre-war jobs. Throughout my professional career I have used my Tulane education in many ways including process control shift supervisor, college physical science instructor, research chemist, kindergarten teacher and process control chemist. Twenty years after graduating I designed and developed a software program to predict demand for commodity chemicals. My professional changes occurred, infrared, due to moves I made with my husband.

As a woman I faced tremendous discrimination after graduating. This intolerance was especially appalling having received fair treatment at Tulane. Hopefully today no prospective employer laughs and hangs up when contacted by a “woman engineer.”
Celebration of the first fifty years of the Society of Tulane Engineers was the focus of this year’s annual meeting held on October 13 at the Hyatt Regency. President Tommy Meehan presided over the festivities beginning with the introduction of special guest and 50th Anniversary Speaker, Murdock Snelling, Jr. (CE’50), founding member of the society. Eight past-presidents were in attendance and were recognized by Mr. Meehan. They were Waldemar Nelson, Dewitt Morris, Jay Oppenheim, George Kleinpeter, Rick Blum, Gerard Gillen, Al Freudenberger and Skip Chandler.

New business to come before the meeting was an increase in dues which Mr. Meehan discusses in his “President’s Corner,” and the election of officers. The current slate of officers will remain in place for another year and at the next annual meeting a vote will be held to determine how future officers are elected. It was discussed that the officers move up annually from treasurer through president, with only a treasurer being elected each year.

If this change in the charter is approved, the out-going president will become a member of a newly created board of advisors.

Dean Nicholas J. Altiero gave a state of the school address and unveiled the Hall of Fame plaques of the recent inductees, Col. Albert J. Wetzel and William Preston Johnston. He then announced the recipients of the Outstanding Alumnus Award and the Harold J. Levey Award for 2001.

The School of Engineering’s Outstanding Alumnus Award recipient was David Filo, a 1988 computer engineering graduate and co-founder of Yahoo!, one of the Internet’s most popular search engines and online service companies. Filo, who was class valedictorian at Tulane, started Yahoo! Inc. with a fellow student while both were graduate students in electrical engineering at Stanford University. He and his partner have been the subject of much national media attention due to the popularity and success of Yahoo!, as well as their outstanding philanthropy.

Dr. Gustavo Yusem was chosen the recipient of the Harold A. Levey Award. The Levey Award recognizes outstanding career achievement within ten years of graduation. Dr. Yusem received his MS and Ph.D. degrees in chemical engineering from Tulane in 1991 and 1995. He recently received an Executive MBA degree from the University of Oregon.

Dr. Yusem began work as a process engineer for Tektronix (now Xerox Corporation) in Wilsonville, Oregon in March 1993. In July 1995 he was promoted to Ink Manufacturing Manager (color printers and inks) and with his new title came the responsibility of directing all engineering activities in the production of printing inks. He has received many industry awards and recognitions for his hands-on problem solving skills in research, production, and manufacturing operations. The most recent award received by Dr. Yusem was Tektronix’s 1999 “Manufacturing Technology Leadership Award.” In 1995 he was awarded Tektronix’s President’s Award. While a student at Tulane, he received the H. H. Dow Memorial Student Achievement Award from the Electrochemical Society and the Potts Memorial Award from the American Oil’s Chemists Society.
Professor Hart Named New Holder of Alden J. “Doc” Laborde Chair in Engineering

Dr. Richard T. Hart is the new holder of the Alden J. “Doc” Laborde Chair in Engineering. At a ceremony on November 30, Dean Nicholas J. Altiero presided over the investiture with “Doc” Laborde and his son, Dr. Monroe Laborde, in attendance. Also included in the audience were many friends, family members and colleagues of Dr. Hart’s.

The Alden J. “Doc” Laborde Chair in Engineering was established in 1984 by Ocean Drilling and Exploration Company (ODECO) to recognize and honor the accomplishments of its renowned founder, “Doc” Laborde. Dr. Hart becomes the third holder of the chair.

In his remarks following his investiture, Professor Hart spoke of the long record “Doc” Laborde has in “...successfully applying a variety of engineering techniques and principles to find innovative yet practical solutions to demanding problems associated with offshore oil exploration. This spirit of innovation, entrepreneurship and leadership were also characteristics of the first two holders of the Laborde Chair in Engineering,...” The first holder of the Laborde Chair was former mechanical engineering faculty member, Stephen Cowin, and the second was William Van Buskirk, founder of the biomedical engineering department and former dean.

Dean Altiero and Doc Laborde

Rich Hart joined the School of Engineering biomedical engineering faculty on Dec. 1, 1982, as an assistant professor. He has an outstanding research background that includes work that seeks to understand, simulate and predict the response of bone tissue to mechanical stimuli. He has collaborated on research projects in brain physics, spine mechanics and ophthalmology. Rich’s articles, book chapters, proceedings papers and technical reports are numerous and he has additionally authored or co-authored over 80 research presentations for national and international engineering meetings. Professor Hart has received numerous awards, the latest of which was the American Society of Engineering Education’s Theo C. Pilkington Outstanding Educator Award. Since 1997, he has served as the department chair in biomedical engineering.

The Hart Family (left to right) Katie, Silvia, Rich and Julia

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MARK YOUR CALENDAR!

Third Annual Tulane Engineering Forum will be held on
September 13, 2002
New Orleans Hilton Riverside and Towers

This Year’s Theme: “Energy and the Environment”

Program and registration information to be mailed during the summer.

For more information, please contact
Jenny Kottler, Forum Coordinator at jkottler@bellsouth.net
New Faculty Members

Brian W. Baetz, Ph.D., P.E., has joined the faculty as a full professor in the civil and environmental engineering department and is serving as department chair. Professor Baetz received his Ph.D. from Duke University in 1988 and comes to Tulane from McMaster University in Quebec, Canada. Dr. Baetz's fields of specialization are infrastructure and sustainable communities, municipal solid waste management planning and environmental systems analysis.

Dr. Dale Joachim joins the faculty as an assistant professor in the electrical engineering and computer science department. He received his Ph.D. from Michigan State University in 1998 and major fields of research include algorithms and signals. Professor Joachim's teaching experiences include laboratory courses at Michigan State University from 1994-97. He comes to the School of Engineering from Sanders, Lockheed Martin where he was employed as the principal electrical engineer.

Joining the staff of the mechanical engineering department as an associate professor is Dr. Ho-Hoon Lee. He obtained his Ph.D. from California Institute of Technology in 1991, and his research interests include automatic control, mechatronics, real-time control, and robotics and automation. Before joining the engineering faculty, Professor Lee was an assistant professor of mechanical engineering at the University of Suwon in Seoul, Korea.

Dr. Jing Peng, Assistant Professor of Electrical Engineering and Computer Science, received his Ph.D. from Northeastern University in 1994 in computer science. He served as an engineering faculty of Oklahoma State University in the computer science department before coming to Tulane. Professor Peng's research interests include machine learning, pattern classification, content-based image retrieval, multiagent systems, data mining and e-commerce.

Dr. Uvais A. Qidwai comes to the engineering faculty as an assistant professor in the electrical engineering and computer science department. Professor Qidwai recently received his Ph.D. from the University of Massachusetts and his research interests include signal/image processing, data fusion, and human computer interaction.

Paul H. Ziehl, Ph.D., P.E., accepted the position of assistant professor in civil and environmental engineering beginning with the fall semester. He received his Ph.D. from the University of Texas at Austin in 2001. His major areas of research include structural applications of fiber reinforced polymers, finite element modeling, non-destructive evaluation and health monitoring, and conventional and fiber reinforced concrete.

Honoring Professor Emeritus Walter Blessey

In 1997 Robert Englekirck (CE’59) challenged his Tulane Engineering classmates and fellow engineering alumni to honor an exceptional professor. Professor Walter Blessey played an important role in the lives of many men and women throughout his teaching career. The Civil Engineering Building, built in 1894, was sorely in need of renovation but only with contributory resources would such finances be available. Dr. EngleKirck’s challenge became the initial pledge in a campaign to raise funds to renovate the Civil Engineering building and to rename it Blessey Hall.

Many graduates and friends stepped up to the challenge and the renovation fund began to grow. On April 11, 2002, the building will be rededicated honoring Dr. Blessey. The names of all those who contributed to this building campaign will be inscribed on a plaque that will be hung prominently in Blessey Hall. If you have not yet contributed to this campaign but would like to have your name included on this plaque please contribute online at http://www2.tulane.edu/giving.cfm or send your check (marked Blessey fund) to Deborah Case, Office of the Dean, School of Engineering, Tulane University, 70118.
Biomedical

Professor Kay C Dee has received a $557,611 National Science Foundation grant for the project "Acquisition of a Multiphoton Confocal Microscope for a Greater New Orleans Consortium of Biological Researchers." This grant will obtain the only multiphoton laser-scanning confocal microscope in the State of Louisiana for use by researchers from Tulane, University of New Orleans, Xavier University, the Audubon Center for Research of Endangered Species, and the USDA Southern Regional Research Center.

Professor Dee was chosen as one of the Tulane Inspirational Undergraduate Professor Awarded for the 2000-01 academic year.

James Eason, Associate Research Fellow in Biomedical Engineering, has been awarded a Whitaker Foundation Biomedical Engineering Grant for his project entitled "The role of phase singularities in determining defibrillation efficacy."

Professors Don Gaver and Kay C. Dee have received a $393,650 grant from NASA for their proposal "Investigations of the influence of air-liquid interfacial stresses on pulmonary epithelial cells in a microgravity environment."

Professor Gaver has been elected a Fellow of the American Institute for Medical and Biological Engineering. This national honor is in recognition of Dr. Gaver's achievements in research and education. His citation of recognition will read: "For describing fundamental pulmonary system behaviors using principles of fluid mechanics and for significant contributions to Biomedical Engineering Education." Dr. Gaver will be inducted in the College of Fellows, Class of 2002 on March 1, 2002 at a ceremony at the National Academy of Sciences in Washington DC.

The cover of the July 2001 issue of the journal Human Brain Mapping pictures the phase structure of human alpha rhythm suggesting brain wave interference patterns. The associated article is authored by Professor Paul Nunez, biomedical engineering graduate student Brett Wingeier, and Professor Richard Silberstein of the Brain Sciences Institute in Melbourne, Australia. Standing brain waves were predicted by Nunez using a mathematical/physiological theory in 1972.

Professor Natalia Trayanova has been notified by the Southeast Affiliate Research Committee of the American Heart Association that her grant proposal "Roles of Structure and Heterogeneity in the Induction and Maintenance of Atrial Reentry" will be funded starting July 1. The grant will allow Professor Trayanova and her post-doctoral fellow, Dr. Edward Vignond, to uncover the mechanisms of atrial arrhythmias and fibrillation.

Chemical

Professor Vijay John has been named chair of the department for a term that will run from January 1, 2002 through June 30, 2006. Professor Kyriakos Papadopoulos has served as chair for the past three and one-half years.

Professor Brian Mitchell was awarded U.S. Patent 6,312,626 for an apparatus to produce ceramic fibers directly from the molten state. The patent, titled "Inviscid Melt Spinning of Mullite Fibers," is shared with one of his former students, Dr. Zhijun Xiao (Ph.D., 1998) who is now with Schlumberger, and former postdoctoral scientist Dr. Haoyue Zhang, who is now a scientist at North Carolina State University.

Professor Kim O'Connor was nominated by Tulane University to compete in the 2002 Howard Hughes Medical Institute Professors Program.

Civil and Environmental

The department, along with the New Orleans branch of ASCE and the Tulane ASCE Student Chapter, recently presented a two-day Trenchless Technology Seminar in Metairie. Approximately 100 professionals attended this event.

Professor Reda Bakeer gave a presentation entitled "Buckling of HDPE Liners," and Professor Glen Boyd presented "Guidelines for Selecting Lead Pipe Rehabilitation and Replacement". This was also a great forum for student involvement and networking with professionals. Four students assisted in manning the registration booth: Kirsten Baldwin-Metzger, Thomas Cole, Jenny Snape and David Birrcher. The organizers contributed $1000 to the ASCE student chapter for use in their activities, and there is considerable interest in having this event come back to New Orleans next year.

Professor Robert N. Bruce, Jr. was recently appointed to the Board of Directors of the Louisiana Transportation Research Center (LTRC) Foundation.

LTRC was created by the Legislature in 1986 and has grown to national prominence through its efforts to improve transportation systems in Louisiana. The center conducts short-term and long-term research and provides technology assistance, engineering training and continuing education technology transfer, and problem-solving services to the Department of Transportation and Development (DOTD) and others in the transportation community. The foundation was established by LTRC as a non-profit corporation to enhance DOTD's research and to address the educational and training needs of the public and private sector.

Professor Bruce will be a featured speaker at the 2002 Louisiana Transportation Engineering Conference in Baton Rouge in February. He will be speaking on his research in prestressed concrete.

Professor Jack Grubbs returned to the school of engineering at the beginning of the fall semester. He will serve in two roles, half of his time will be spent as associate dean for external programs and the other half in his faculty role. Professor Grubbs will be in charge of student recruiting, industry internship opportunities and international programs.

Professor Laura J. Steinberg was awarded a Rapid Response Grant from the Natural Hazards Center in Boulder, CO to support research regarding hazardous materials releases in the immediate aftermath of natural disasters. She also received a grant from the National Science Foundation, along with Principal Investigator Raymond Burby of the University of North Carolina, to study the effect of land use regulation on development in areas prone to natural hazards.

Professor Steinberg was an invited participant at a workshop sponsored by the...
National Science Foundation to develop curricula and a national research agenda in Earth Systems Engineering, a discipline of engineering that emphasizes sustainability, community empowerment, and respect for natural systems. She was also an invited participant at a conference sponsored by the Institute for Civil Infrastructure Systems at New York University and the National Science Foundation. The purpose of the conference was to discuss methods for addressing national infrastructure priorities.

Professor Paul Ziehl was invited to present a lecture at the third annual Tulane Engineering Forum. The theme of this year’s forum was Advanced Materials. He gave a presentation entitled “Fiber Reinforced Polymers for Improvements to the Transportation Infrastructure.” The presentation focused on both new construction with FRP materials and strengthening of existing structural systems.

Professor Ziehl presented papers at the ASME Piping and Pressure Vessel Conference in regard to acoustic emission monitoring and the American Society of Composites Conference in regard to the design of an FRP bridge system. He will speak at the 2002 Louisiana Transportation Engineering Conference in Baton Rouge in February.

Electrical Engineering and Computer Science

Professor Enrique Barbieri and PhD candidate Slobodanka Muzdeka published an article entitled “A New Approach to Optimization-Based Defibrillation” in the Proceedings of the 38th Annual Rocky Mountain Bioengineering Symposium. The symposium was held in April. Muzdeka received the “Best of Session” award for her presentation.

Associate Dean Andrew Martinez, Brian S. Bourgeois (EE’82; ME’89; PhD’91) of Slidell, LA, Peter J. Alleman of Youngsville, LA, Jami J. Cheramie of Lafayette, LA, and John M. Gravel, also of Lafayette, LA have been awarded U.S. Patent 6,338,023 for an autonomous survey system (AutoSurvey).

Mechanical

Professor Michael Larson’s article “Force and Shapes of Liquid Bridges Between Circular Pads,” co-authored with former doctoral student Melody Arthur in the journal *Experimental Mechanics*. Professor Larson also organized and moderated a panel discussion on the topic “The State of Engineering Design Education and ABET EC2000: views from industry and academia,” during this year’s ASME International Mechanical Engineering Congress and Exposition in New York City. His work on “Limits of Crack Growth Stability in DCDC Compression Specimens” was presented at that same conference in November.

Professor Ho-Hoon Lee presented two papers at the IEEE International Conference on Robotics and Automation 2001, held in Seoul, Korea, in May 2001. The first lecture was entitled “A Nonlinear Model-Based Anti-Swing Control of an Overhead Crane with High Hoisting Speeds,” and the second was entitled “A New Fuzzy-Logic Anti-Swing Control for Industrial Three-Dimensional Overhead Cranes.” These papers are co-authored, respectively, by Seung-Gap Choi and by Sung-Ran Cho, graduate students at Suwon University in Seoul, Korea.

Professor Monte Mehrabadi, Chair of the Department, received a $70,000 grant from the U.S. Department of Energy, National Energy Technology Laboratory/University Partnership Program for supporting two graduate research assistants for a year. The research focus is on modeling the flow of wet granular materials.

Efstathios Michaelides, Associate Dean for Research and Graduate Studies, is the recipient of the American Society of Mechanical Engineers Freeman Scholar Award for the year 2002. This award, given since 1926, is to recognize outstanding contributions in the area of fluids engineering. The award will be presented during the 2002 International Mechanical Engineering Conference and Exhibition where the Freeman Scholar is also expected to give a plenary lecture. Professor Michaelides has also been selected to serve a five-year term on the executive committee of the American Society of Mechanical Engineering, Fluids Engineering Division.

Professor Asher Rubinstein was awarded a NASA grant for three years, totaling $276,000. The subject of the NASA project is development of a model that will simulate failure development in thermal barrier coatings. Recently, Professor Rubinstein presented lectures at the 10th International Conference on Fracture in Honolulu, Hawaii, and the 7th Mechanisms in Temuco, Chile. The lectures discussed aspects of crack path simulation in nonlinear materials. Prof. Rubinstein chaired sessions at these conferences, including a session on composite materials at ICF, and a session on fracture mechanics at PACAM.

Professor David Sailor is invited to give a keynote lecture at the upcoming North American Heat Island Summit to be held in Toronto in May 2002. Later that month he will be chairing a session on heat island mitigation at the 4th Symposium on the Urban Environment in Norfolk VA.


Staff Anniversaries

Dean Nicholas J. Altiero recently presented Tony Jensen, supervisor of mechanical services, with a 25-year certificate of employment, and Belinda Lacoste, executive secretary in chemical engineering, with a 5-year certificate of employment.

(left to right) Dean Nicholas J. Altiero presenting 25-year certificate of employment to Tony Jensen.
SOCIETY OF TULANE ENGINEERS
“FIRST ANNUAL GOLF OUTING”

EASTOVER COUNTRY CLUB
NEW ORLEANS
JUNE 3, 2002

BUFFET LUNCH 11:30 A.M.
SHOTGUN START 12:30 P.M.

COST : $110.00/PLAYER – Includes lunch, cart, practice tee and round of golf

Name: ___________________________________________ Hdcp : __________

Address: __________________________________________

Phone: ( ) _______________________________

Please group me with the following players

1. ___________________________________________ 2. ___________________________________________

3. ___________________________________________

Hole sponsorships are available for $ 200.00 per hole

Make checks payable to:
The Society of Tulane Engineers
For more information, including information on hole sponsorships, call
Bob Kahl at 504-734-4335
Mail to Bob Kahl at 3748 Ashton Drive, Destrehan, LA 70047

Entries are due by May 20, 2002
(Please print all information)
President’s Corner

As we start off 2002, I would like to thank you for your continued support of the Society of Tulane Engineers and our efforts in support of our school of engineering. We continue to build upon the reputation of the Tulane Engineering Forum, we are planning additional events, and we have made some changes in how we manage the Society. We are enthusiastic about the coming year with our Engineering Week activities, our STE Golf Tournament and commencement activities, as well as our developing website.

A special thanks goes to the faculty who stepped up willing to be speaker stand-ins when the terrorist attacks of September 11 last year occurred 10 days prior to our Forum. With the suspended air travel, we were not certain that our out of town speakers could make it. Thankfully, most were able to make it, and where they could not, we were able to substitute for them with faculty members on less than a week’s notice. We had a very successful Forum, with quality technical presentations, excellent general session speakers, and an audience appreciative of the information and the opportunity to earn professional development hours credit.

The membership voted for an increase in the annual dues to $40 at the 50th Annual Meeting held over the homecoming weekend. There had not been an increase in dues for several decades. In order to keep up with publication costs and to support the Society’s increased programming efforts such as the Forum as well as the awards dinner for the outstanding students, we asked for and received this approval.

We also created the Board of Past Presidents of STE, a group who were very well represented at the meeting. This group will be called upon for advice and input to the STE officers and the school of engineering in various areas including programming and organizational matters.

To be voted on at the 2002 Annual Meeting is an officer succession structure where the officers move up from treasurer to secretary to vice-president to president. We are considering this to build continuity in the service of the officers. As the membership has become more global in scope, we are actively exploring expanding the electronic means of communication such as the STE website. I encourage all of you to go have a look at www.eng.tulane.edu and click on Alumni Information to see where we are so far.

On behalf of the officers of STE, I extend to you our best wishes for a prosperous 2002.

Best regards, Tommy Meehan (ChE 1983)

Professor Peter Pintauro Receives First Annual Outstanding Researcher Award

Recognizing the need to honor deserving scholars and to increase the visibility of the School of Engineering’s research activity, the Outstanding Researcher Award was established in 2001 by the faculty of the School of Engineering upon the recommendation of the School’s Research and Graduate Studies Committee.

Dr. Peter Pintauro, the first recipient of this award, was recognized at a ceremony and reception on November 15, 2001. Dean Nicholas J. Aliiero unveiled the plaque that will hang in the School with the name of each year’s recipient.

As part of the program for this well-attended event, Dr. Pintauro gave a lecture on some of his research work, entitled “Methanol Fuel Cells: Challenges and Opportunities.” In closing, Dr. Pintauro gave praise to his research team. “The research productivity of a professor is dependent upon the students and post docs working in his or her lab,” Pintauro remarked, “and I’ve been very fortunate over the years at Tulane to have had creative, intelligent, and hardworking co-workers and this award could not have been possible without their help.”

Dr. Pintauro is a professor in the Chemical Engineering Department. His research interests are in the areas of electrochemical engineering, fuel cells, membrane fabrication and separations, membrane transport modeling, and organic electrochemical synthesis. He is a recognized expert in ion-exchange membranes for electrochemical applications and is the leading authority on the fabrication and characterization of polyphosphazene-based ion-exchange membranes. He has authored or co-authored numerous scientific articles, proceedings papers and book chapters, and holds four patents. Since joining Tulane, he has attracted over $3.0 million dollars in research support, graduated 10 Ph.D. and 6 MS students, and supervised 9 post-doctoral scholars.

2001-2002 Society of Tulane Engineers Officers

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(kneeling) Professor Peter Pintauro, back row (left to right) Roy Carter, Jeong Lee, Hwang Chan You, Maria Gil, Jihua Hao, Ryszard Wycisk
Retired Professor Now Teaches the Benefits of Planned Gifts

Planned gifts can provide Tulane’s supporters with income for life, offer them considerable tax advantages and allow them to benefit a particular interest at the university. Former School of Engineering professor John L. Martinez and Elsie Brubacher Martinez, two of the most dedicated and loyal alumni of Tulane, can attest to the benefits of planned gifts.

For the couple’s 25th wedding anniversary, John made a planned gift to the university via Tulane’s pooled income fund. The fund provides a life income for Elsie, while it is invested by the university for growth. Since the gift was made, it has tripled in value, John notes.

Eventually, it will benefit the Elsie Catherine Brubacher Scholarship at Newcomb College. “Naming a scholarship after Elsie seemed like a perfect gift,” says John. “She had received a scholarship to Newcomb and could not have attended otherwise.”

Says Elsie, “I was thrilled and deeply touched when Johnny instituted the scholarship in my name. I’ve always been grateful for my own education at Newcomb and was gratified at the prospect that other girls would have this opportunity some day.”

The couple made two additional pooled income fund gifts: one that will benefit the John and Elsie Martinez Scholarship Fund at the School of Engineering and one that will provide general support to the School of Medicine.

With these charitable gift plans in place, John and Elsie then explored other ways of giving that allowed them to also help their daughter. One plan, a charitable remainder trust, is currently paying the couple income for life and then will pay their daughter income for her life before benefiting Tulane. The other plan, a charitable lead trust, is already paying income to Tulane, but will distribute its assets to their daughter when the trust ends.

“It is possible to benefit both your family and charity,” says John. “You do not have to choose one or the other. And the tax advantages of planned gifts are an added benefit.”

A 1943 graduate of Tulane’s School of Engineering, John Martinez has served his alma mater in one capacity or another for more than 50 years. For the past 15 years, he has been a consultant in the development office of Tulane University Health Sciences Center. In that capacity, he routinely teaches the benefits of planned giving to prospective donors and his colleagues on the development staff.

John accepted his first position at the university in 1946 as an instructor in the School of Engineering. In 1951, he completed a master’s degree in mechanical engineering at Louisiana State University and returned to Tulane’s School of Engineering, where he worked his way up to full professor (1966) and assistant dean (1958-1976). From 1976-79, he was dean of admissions for the College of Arts & Sciences and the Schools of Architecture and Engineering. In 1979, he moved to Tulane’s development office as associate director and then director of planned gifts and remained there until 1986. In 1994, John served as co-chair of the School of Engineering’s Centennial Celebration Committee and was honored at the 1995 Tulane alumni banquet as a Volunteer of the Year.

Elsie Brubacher Martinez, a New Orleans writer who co-authored Uptown/Downtown: Growing Up in New Orleans in 1986, graduated from Newcomb in 1948 with a bachelor’s degree in sociology. An award-winning swimmer in high school, Elsie was a member of the varsity swim team and president of the Barracuda Swim Club at Newcomb. She also served on the Newcomb Athletic Committee, worked on The Hullabaloo and was elected to Phi Beta Kappa. She was the class speaker at the 1948 Newcomb graduation.

Elsie has maintained her ties to Newcomb and Tulane as a member of the Tulane University Women’s Association, the Tulane Medical Center Hospital Auxiliary, Friends of Tulane Library and the editorial advisory board of Newcomb College’s alumni magazine, Under the Oaks. She also serves on the boards of the Milne Home School for Girls and the Catholic Book Store.

Alumnus Robert Englekerk to Give Presentation at the School of Engineering

World Renowned Engineer Robert E. Englekerk, a 1959 civil engineering graduate, will make a presentation entitled “Design Aspects of the Paramount Apartment Building” on April 11, 2002 at the School of Engineering. This event will be held in the sixth floor conference room of the Lindy Boggs Building from 2 to 3 p.m. and is open to the public.

Dr. Englekerk received his Master of Science in Engineering and Ph.D. from the University of California at Los Angeles. He is President and CEO of EPI Englekerk Partners Consulting Structural Engineers in Los Angeles, California, and is a licensed structural engineer in over twenty states. Among his many career achievements was the Getty Center in Brentwood, California where he was the structural engineer of record.

STE Senior Awards Banquet

Wednesday, April 24, 2002
Kendall Cram Room
University Center
Tulane University
6:00 p.m.

For reservations and cost information contact:
Barbara Hogue, Dean’s Office
865-5764 or bhogue@tulane.edu
BME Alumnus Co-Founder of Company Holding Patent for the CryoPen

Dr. Michael J. Haas (BME’79; MD’83 LSU) is the co-founder of CIMEX BioTech, L.C., a biomedical engineering company that is dedicated to the research and development of innovative, technologically-advanced medical products and applications that will enhance the quality of health care.

For the last three years, CIMEX has been working to develop a tool for primary care doctors to treat abnormal skin lesions. The product, “CryoPen,” provides a method for performing cryosurgery faster, better, cheaper and safer than any current technologies. The CryoPen allows doctors to rapidly treat skin lesions that are cancerous or pre-cancerous on their patient population in a rapid, cost-effective way. At the present time the company holds two patents on this product with one more pending and is anticipating FDA approval for the CryoPen in early 2002.

In an interview with Dr. Haas conducted by Edward Karp* that appeared on December 12, 2001 at BayouBuzz.com, a technology news website. Mr. Karp had this to say, “It is very exciting to see engineers like Dr. Haas who not only go on to medical school, but who apply their engineering ingenuity and skills to improve the quality of health care.”

Dr. Haas practiced medicine for over ten years before co-founding CIMEX. He resides in Covington, Louisiana and can be reached at mjhaas@cimexbiotech.com.

Edward Karp is president of Cyberhealth, a telemedicine company, and contributor to BayouBuzz.com. He also serves as an instructor in the Biomedical Engineering Department at Tulane School of Engineering.

A. G. Gottschall (ME’43) sends word that if anyone who hasn’t read his book, Growing Up in New Orleans, would like a free copy to please get in touch with him by mail, 11 Magnolia Trace, P. O. Box 656, Point Clear, AL 36564; by fax, 251-990-5465; or by phone, 251-928-6341.

Roy Slovenko (ChE’48) won both the first and third prizes in a photographic competition recently sponsored by Nature Odysses, a National Audubon Society travel program. Slovenko took the photographs, one of a black-crowned night heron and the other of black-necked stilts, while on a Nature Odysses trip to Hawaii. To see the photos in color, go to http://royenko3.homestead.com/hawaii.html.

1950’s

Myron A. Pessin (ME’53) reports that following his retirement from NASA with 38 years of service, he joined United Space Alliance (the space shuttle operating contractor) to support the transition of the external tank contract from NASA to United States Alliance. This effort is still underway with the complete privatization of the space shuttle program scheduled for completion by 2004.

Robert E. Rood (EE’57) retired from Electronic Data systems in October 1999. He is currently consulting as a technical writer.

1960s

Peter D. Prevett (EE’60) and his son, Todd H. Prevett (B’95), are partners in Prevett & Prevett, Attorneys at Law, and are presently preparing to argue a case before the United States Supreme Court.

William Cavanaugh III (ME’61), president and chief executive officer of Progress Energy, Raleigh, NC, has been elected a member of the National Academy of Engineering. He was elected to the Washington, D.C.-based organization for his contributions to excellence in the generation of electricity from nuclear power.

1980s

Mike Artigues (BME’88) and his wife, Patricia, announce the birth of their son, Aaron James, on May 8, 2001. Siblings Kenny, Annie, Matthew and Patrick welcomed their brother home.

Artigues practices general pediatrics in McComb, MS and served as 2000-01 chief of staff at Southwest Mississippi Regional Medical Center.

1990s

Kenric P. Nelson (EE’86) and his family moved to northern New Jersey this summer. Their second child, Ethan, was born on January 19, 2001. Nelson recently completed a PhD at Boston University and will be developing a small business. Photrek Corp. E-mail may be sent to him at knelson@photrek.com.

Chris E. Schaefer (ME’94) has received his second U.S. patent for a direct connect battery system. His first patent was for a high current electric vehicle connection system. He married in 1999 and has two sons, Jacob and Michael. He is currently working as a purchasing commodity leader at Delphi Automotive.

Vanessa Germaine Carroll (BME’98) and Robert Aloysius Ohnes were married on July 21 in New Orleans. She is a fourth-year medical student at Tulane.

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In Memoriam

Wayne R. Barcelo (EE’60, Ph.D.’95)
Thomas H. Bienert Sr. (MS’72 ME)
Clarence L. “Buddy” Black Jr. (ChE’48)
Hudson G. Boué (ME’50)
James D. Brock (MS’86 Pet.)
George V. Coppola (non-grad’90)
Donato E. Guiza (CE’39)
James Hanemann Jr. (CE’57)
George Janvier Jr. (CE’35)
Leander A. Lorio Jr. (EE’61, MS’69)
Kenneth P. Miller (ME’47)
James C. Murphy Jr. (non-grad’47)
Thomas C. Oderstrom Jr. (non-grad’47)
Frank X. Remond Sr. (EE’53)
Daniel J. Roussel Jr. (BME’86)
Clair L. Shively (CE’53)
William J. Simpson (EE’61)
George H. Thompson (ChE’41)
Felix J. Viosca (ME’55)
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>April 11, 2002</td>
<td>Rededication and Naming of the Civil Engineering Building</td>
<td>Engineering Complex Courtyard By Invitation</td>
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<td>4:30 to 6:30 p.m.</td>
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<tr>
<td>April 24, 2002</td>
<td>STE Senior Awards Banquet</td>
<td>Kendall Cram Room University Center</td>
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<td>6:00 p.m.</td>
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<td>May 16, 2002</td>
<td>Emeritus Club Crawfish Boil</td>
<td>Alumni House (Class of 1951 to be honored)</td>
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<td>5 to 7 p.m.</td>
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<tr>
<td>May 17, 2002</td>
<td>Emeritus Club Luncheon</td>
<td>Kendall Cram Room University Center</td>
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<td>12 Noon</td>
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<td></td>
<td><strong>Class of 1952 Reunion</strong></td>
<td>Lindy Boggs Building Lobby – On Campus</td>
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<td>6 to 9 p.m.</td>
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<td>May 18, 2002</td>
<td><strong>Unified Commencement</strong></td>
<td>Louisiana Superdome</td>
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<td><strong>Engineering Commencement</strong></td>
<td>Theatre of the Performing Arts</td>
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<td>1:00 p.m.</td>
<td>801 N. Rampart Street</td>
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<td>June 3, 2002</td>
<td><strong>First Annual STE Golf Outing</strong></td>
<td>Eastover Country Club, New Orleans</td>
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<td>Buffet Lunch 11:30 a.m.</td>
<td>(See Registration Form on Page 8)</td>
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<td>Shotgun Start 12:30 p.m.</td>
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<tr>
<td>October 26, 2002</td>
<td><strong>Homecoming 2002</strong></td>
<td>Louisiana Superdome</td>
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(Class of 1952 will receive more information on the reunion in early spring from the Dean’s Office. If you have questions, please call Barbara Hogue at (504)865-5764.)