Emeritus Dean Johnson Gives commencement address

Emeritus Dean Lee H. Johnson of the School of Engineering, was the speaker at the Engineering Commencement in May. Dean Johnson served the School for 29 years, 22 of them as Dean. It was with wit and flair that he served the University.

Three years ago Dean Johnson retired from University service. This graduating class of 1982 was the last Tulane Engineering class to benefit from his outstanding instruction in calculus.

During his tenure at Tulane, Dean Johnson led the School of Engineering to a position of excellence and prominence in the educational field. In 1972, he was named the William R. Irby Professor of Engineering at Tulane, a professorship awarded to faculty members of the University’s various schools and colleges who are exceptional scholars and leaders in their field.

Dean Johnson departed from the usual format of commencement addresses. He gave the graduating class their last classroom lecture. His message to them was "What is Engineering and How Does One Succeed at It?" He told the class that it was important that they be clear, brief, precise, and unmistakable in their use of English in transmitting information as a professional engineer, that the matter of judgement is required in engineering. He charged them to use their best judgement objectively and impartially as best as they could. How could they succeed in engineering? "...if you want to succeed in engineering, you must W - O - R - K! Class dismissed."

The class rose to give Dean Johnson a standing ovation.

Left to right: Dean Hugh A. Thompson, Pimolrat Dulyanant, Eugene F. May and Emeritus Dean Lee H. Johnson (Commencement Speaker).

AGAIN, TWO VALEDICTORIANS

Commencement for the School of Engineering was on Saturday, May 15, 1982 in McAlister Auditorium on the Tulane campus. For the second year in a row there were two valedictorians of the graduating class. Both received a perfect 4.0 average for their four years of undergraduate study at Tulane.

Pimolrat Dulyanant, who received a Bachelor of Science in Computer Science, is from Bangkok, Thailand. She is presently enrolled in the Tulane School of Business where she is pursuing the Master of Business Administration degree.

Eugene F. May, receiving a Bachelor of Science in Engineering degree in Biomedical Engineering, is from New Orleans. He is now attending the Tulane School of Medicine.

The School is proud of them both and wishes them success in their graduate studies and future careers.

There were 154 receiving a bachelors degree this year and forty-four receiving the Master of Engineering degree.

Dr. Ronald S. Rivlin was awarded an Honorary Doctor of Science degree from the School of Engineering. He received the Bachelor of Arts in Physics and mathematics from St. John’s College, University of Cambridge in 1937. He also received the Master of Arts and Doctor of Science at Cambridge. During his career, Dr. Rivlin has held various distinguished academic posts including the directorship of the Center for the Application of Mathematics at Lehigh University. He is presently Adjunct University Professor at Lehigh. In recognition of his research in developing mathematical theories and non-linear continuum mechanics, Dr. Rivlin has been awarded numerous international honors including the Bingham Award Medal and Panetti Prize.

The Fifty-year graduates who were in attendance were recognized. Also recognized were the R.O.T.C. graduates.

Following the Commencement program, the graduates and their families were invited by Dean and Mrs. Hugh Thompson to a reception in the Kendall Cram Room of the University Center.

STE Annual Homecoming Luncheon October 16, 1982 (See President’s Message for more details)
ACCOMPLISHMENTS . . .

James M. Todd, Technological Accomplishment Medal, 1981

Mr. J. Bres Eustis, P.E., Chairman of the Board and Partner, Eustis Engineering Company in Metairie, Louisiana, was the 1981 recipient of the Louisiana Engineering Society James M. Todd Technological Accomplishment Medal.

Mr. Eustis received a B.E. degree in chemical engineering from Tulane University in 1934, completed a soil mechanics course at MIT in 1939 and in 1941 received a M.S. degree in civil engineering from Harvard University.

He holds memberships in professional and technical societies including ASCE.

ANDREW M. LOCKETT MEDAL

RODNEY M. VINCENT, P.E., is this year's recipient of the Andrew M. Lockett Medal. This award, a civic activities award, is given by the Louisiana Engineering Society in honor of Andrew M. Lockett who was a member of LES from 1900 until his death in 1945. The award was first given in 1951.

Rodney Vincent graduated from Tulane University with a B.S. degree in Civil Engineering. He is presently the administrator-engineer for the Calcasieu Parish Police Jury in Lake Charles.

Mr. Vincent is a member of the Louisiana Engineering Society, National Society of Professional Engineers, National Association of County Engineers, Society of Tulane Engineers and the National Association of County Administrators.

While serving as a member of the Policy board for the Urban Observatory program of the National League of Cities in conjunction with the city of Lake Charles and McNeese University, Mr. Vincent contributed much time and effort in the development of several studies including the role of McNeese University, foreign trade zones, land use in Calcasieu Parish, solid waste disposal and a study of major industries in Calcasieu Parish.

His memberships and offices held in civic organizations are numerous. Some of these organizations are the Greater Lake Charles Chamber of Commerce, Lake Charles Jaycees, Lake Charles Ballet Society, Boy’s Village and Calcasieu Parish United Appeals. He is also on the Board of Trustees of the First United Methodist Church.

Mr. Vincent’s dedication to civic involvement and service to his profession are in keeping with the ideals of this award, the Andrew M. Lockett Medal.

F. J. VAN ANTWERPEN AWARD

On November 9, 1981 at the Fairmont Hotel in New Orleans, Marx Isaacs - Engineering '29, Chemical Engineering, was the recipient of the F.J. Van Antwerpen Award for service to AIChE. The award was made at the Honors Luncheon of the Fall 1981 Annual Meeting.

Mr. Isaacs is Southwest Editor, Chemical Processing, with the Putman Publishing Company in Houston, Texas.

A. B. PATERSON MEDAL FOR AN ENGINEER IN MANAGEMENT

Waldemar S. Nelson, P.E., founder and chairman of the board of Waldemar S. Nelson and Company, Inc., a New Orleans-based consulting firm, was selected this spring by the Louisiana Engineering Society as the recipient of the A.B. Paterson Medal, which was first given in 1965. Albert B. Paterson, an active member of the principles to permit rapid and economical construction of airbases and aircraft landing facilities in the U.S. and overseas.

Mr. Eustis can be credited for his formation of a procedure to determine required pipeline densities to prevent flotation of oil pipelines through marsh and swamp areas, as well as through open bodies of water. He also did research on the mass specific gravity of semi-liquid soils which led to the establishment of the procedure whereby economical thicknesses of pipe coating can be selected for various reaches of pipeline.

Bres Eustis is a worthy recipient of the James M. Todd Technological Accomplishment Award. His innovative application of the principles of soil mechanics has greatly advanced the technology of civil and geotechnical engineering.

Society from 1923 until his death in 1952, was an engineer, administrator, executive, banker, civic leader and humanitarian. Mr. Nelson, a graduate of the School of Engineering, Tulane University, worked in various locations and in several fields before opening his own practice in 1939. He is a registered professional engineer in 35 states.

Waldemar Nelson has long been active in professional engineering societies: in NSPE, he served as Chairman of the Board of Ethical Review and Vice President of the Southwest Region; Treasurer of the National Council of Engineering Examiners and President of the Louisiana Engineering Society. He’s also served as President of the Society of Tulane Engineers and of the Tulane Alumni Association. Other offices have been in the Engineers Club and in the Louisiana State Board of Registration for Professional Engineers and Land Surveyors. Presently he is a Trustee of the Tulane Engineering Foundation. He holds memberships in numerous engineering associations and honoraries.

Mr. Nelson has been the recipient of many honors during his career, including the Outstanding Engineering Alumnus from Tulane University, the Louisiana Engineering Society’s Public Relations Award and the Professional Service Award, and the Distinguished Service Award of the National Council of Engineering Examiners.

These outstanding engineering accomplishments and active participation in his profession make Waldemar Nelson a most deserving and distinguished recipient of the A.B. Paterson Medal for an engineer in management.
ANGELA GREGORY IS HONORED

Angela Gregory is well-known and loved in the School of Engineering. Two pieces of her sculpture, one of her father and one of her mother, Selina Brea Gregory, are out on the wall outside the Dean's Office in the School of Engineering. Her mother was founder of the Women's Auxiliary of the Louisiana Engineering Society. Her father was Past President of LES.

Another piece of her work, a bas-relief of Pendleton Lebhe, a pioneer in wireless and radio, is located in the hallways of the Electrical Engineering Department outside the laboratory named for him, the Pendleton Lebhe Electronics Laboratory.

Miss Gregory designed two medals awarded at the Annual Senior Awards Dinner, the William B. Gregory Medal and the James M. Robert Medal. She also designed the James M. Todd Technological Accomplishment Medal which is awarded each year by the Louisiana Engineering Society.

Miss Gregory richly deserves the honor of Outstanding Alumnae of the School of Architecture.

Business...

Presidents Message

Dear STE Members,

Your society is alive and well. Because of our intensive fund raising telephone campaign, we are anticipating significantly greater revenues for 1982 than in the recent past. We hope that you will continue to support your society by mailing in a contribution in the envelope provided. Please include any news about yourself on the enclosed alumni news form. It's a great way to keep up with your classmates.

Speaking of classmates, I hope you will be reunited with yours for the Society's annual homecoming luncheon on Saturday, October 16, 1982. The cocktail hour will begin at 11:30 a.m. with lunch to follow ($7.00 payable at the door). For reservations please contact the Dean's Office, School of Engineering (865-5764). We also hope to see you at the game at 7:30 Saturday night in the Superdome.

Last year's homecoming meeting was a great success, with attendance up almost 50% over previous years. The meeting featured a "State of the School" address by Dean Hugh Thompson, and the presentation of the Levey Award. The Levey Award is presented to an engineering alumnus within 10 years of his graduation from Tulane who has made significant contributions to engineering and society. The 1981 recipient was Dr. George Swan. George is a ChE alumnus who is employed by Exxon in Baton Rouge. He has numerous patents and publications in the area of catalyst design. George is also a past president of STE.

My goals as STE President for 1982 have been formulated over my last seven years on the STE executive committee. They include:

PIERRE E. HOLLOWAY
Outstanding Alumnus 1981

Pierre E. Holloway, Engineering '49, the senior Vice President for nuclear affairs at Gulf Oil Corporation, was the 1981 Outstanding Alumnus of the School of Engineering.

Mr. Holloway joined Gulf after he graduated and served in a number of positions including General Manager of Caribbean Gulf Refining in Puerto Rico, President of Gulf Oil, Asia in Tokyo and Vice President for Corporate Planning and Economics.

His membership in professional societies includes the Society of Tulane Engineers, American Petroleum Institute, American Institute of Chemical Engineers and Advisory Board of the Tulane School of Engineering. He was also active in civic and community activities, among them the Carnegie Institute, World Affairs of Pittsburgh, Pittsburgh Symphony Society and Young Men's Christian Association of Pittsburgh.

The School is pleased to have been represented by such a deserving graduate.

1982-83 STE OFFICER NOMINATIONS

President ............... Larry A. Perrin
1st Vice-President .......... Oliver S. Delery, Jr.
2nd Vice-President .......... Dale T. Hunn
Secretary ..................... Edward M. Simmons, Jr.
Asst. Secretary .............. Richard K. Blum
Treasurer ................. Marina Elliott
Asst. Treasurer ............ Albert Foley
Director and Publications Chairman .......... Tip Fowler
Director and Historian .......... Robert Boh
TREASURER'S REPORT
September 1, 1982

Balance as of 9/1/81 .................................................. $ 377.41
1982 Contributions .................................................. 2,610.00

EXPENSES
Newsletter printing and mailing ................................ $1,574.63
Senior Awards Banquet ............................................. 1,566.15
Plaques, Awards and Certificates .................................. 331.24

Balance .... deficit .................................................. $ (484.61)

Associate Dean Receives Teaching Award

One of the most delighted participants at the Senior Awards Banquet was not a student. He was Dr. Samuel L. Sullivan, Associate Dean for Undergraduate Studies and Professor of Chemical Engineering, who received the Society of Tulane Engineers and Lee H. Johnson Award for Teach-

ing Excellence.

This prestigious award has been given annually since 1976. It is highly coveted by the faculty since the recipient is selected by alumni of the School. The first recipient was Dr. Lee Johnson in 1976. Other recipients have been Professors Daniel H. Vliet of Electrical Engineering, Robert N. Bruce of Civil Engineering, Louis P. Orth of Mechanical Engineering, Peter Y. Lee of Civil Engineering, and last year Dr. William C. Van Buskirk of the Biomedical Engineering Department.

The attached photograph shows Sam receiving his award from the President of the Society of Tulane Engineers, Dr. Danny W. McCarthy. As many of you know, Dr. McCarthy also serves as a faculty member in the Department of Chemical Engineering. This outstanding honor was particularly well deserved by Dean Sullivan. For almost twenty years he has given unstintingly of his time and energy to students who have questions or problems with the Unit Operations course in Chemical Engineering. This capstone course combines most of the important disciplines of Chemical Engineering and prepares our juniors for the dreaded summer U.O. Laboratory experience, which is so meaningful to their preparation for professional practice.

Faculty ...

RICHARD B. ASHMAN, instructor in the Biomedical Engineering Department, joined the faculty in August. He expects his Ph.D. degree in Biomedical Engineering this December. He received his M.S. in Mechanical Engineering in June 1980 from California Institute of Technology and the B.S. in Mechanical Engineering from the University of Miami in May 1979.

Prof. Ashman has been a Schlieder Foundation Fellow, 1980-82 at Tulane and while at California Institute of Technology was the recipient of a Graduate School Research Assistantship. He has also co-authored several research articles for publication.

Profile of the Freshman class

The School of Engineering had a banner year in recruiting freshmen. A total of 262 students enrolled for the fall 1982 semester. The quality was up significantly with 62 percent from the upper 10 percent of their graduating class compared to 49 percent for last year. The combined SAT scores of 1200 puts the school in rather select company nationally.

The class comes from 34 states, Puerto Rico and 9 foreign countries.

For the first time in several years, the percentage of women declined. This class has 24 percent compared to 29 percent last year.

A canvas of the career plans shows that the order of interest is in the following order: Biomedical, Electrical, Chemical, undecided, Computer Science, Mechanical and Civil.

DENNIS DE CHAMPEAUX is a Visiting Associate Professor in the Computer Science Department. He is on sabbatical leave this year from the Economische Faculteit, Vakgroep Bedrijfsinformatica at the University of Amsterdam where he is a Researcher.

Dr. de Champeaux has a Ph.D. in mathematics, physics and logic from the University of Amsterdam. He did his other studies at the University of Leiden in mathematics, physics and astronomy.

He has been at the University of Amsterdam since 1970 as a Researcher, with different ranks. He was also with Philips in system design; he has done consulting work in the Netherlands. Dr. de Champeaux has lectured in programming language such as ALGOL-GO, FORTRAN, PASCAL, LISP, ATN-Woods and a course in problem solving.

Dr. de Champeaux has authored books, articles in journals and newsletters and has presented papers at various conferences.
More Faculty...

MOREZA A. MEHRABADI, who came to Tulane July 1, 1982 as Assistant Professor of Mechanical Engineering, was previously at Northwestern University where he was a Post Doctoral Fellow and Lecturer in the Department of Civil Engineering. Dr. Mehrabadi was also a recipient of a N.S.F. Graduate Traineeship - 1973-76 and 1977-79.

Dr. Mehrabadi received his B.S. in Mechanical Engineering from Tehran University in August 1969. He did his graduate work at Tulane, receiving an M.S. in Mechanical Engineering in 1973 and the Ph.D. in Applied Mathematics in May 1979.

While with the Lavan Petroleum Company (LAPCO) in the Persian Gulf, Dr. Mehrabadi was Onshore Control Room Director. He also served as Technical Consultant with the National Engineering Corps of Iran.

His research interests include mixture theory, microstructural continuum theories, plasticity and mechanics of granular materials.

DR. GYÖRGY EGN RÉVÉSZ joined the Computer Science faculty January 1, 1982. He received both a Mathematics - Physics Teacher Diploma and a Ph.D. in Mathematics from Lorand University of Budapest. He also was a Candidate of Mathematical Science from the Hungarian Academy of Sciences.

Before coming to Tulane, Dr. Revesz was Visiting Associate Professor in the Department of Computer Science, University of Kentucky. He was Senior Research Fellow at the Computer and Automation Institute of the Hungarian Academy of Sciences and Visiting Associate Professor in the Virginia Polytechnic Institute and State University Department of Computer Science. Dr. Revesz also served as Head of Software Laboratory at the Institute for Co-ordination of Computer Technic, Budapest, and Head of Systems Software Department at the Processing Laboratory of the Central Statistical Office in Hungary.

At the National Bank of Hungary he was Chief Programmer and before that was both a Research Assistant and Research Fellow.

Dr. Revesz’s research interests include formal languages, theory of computation, mathematical semantics and working in compilers.

He has been the recipient of two fellowships: one from the UNESCO in 1961 to study computer science at the University of Bonn and at the Technische Hochschule in Darmstadt; the other an IREX fellowship for study at the University of California, Los Angeles.

Dr. Revesz speaks Hungarian, English, German, French and some Russian.

DR. VIJAY T. JOHN joined the faculty of the Department of Chemical Engineering July 1, 1982. Dr. John received his B.S. in Chemical Engineering in 1976 from The Indian Institute of Technology in Madras, India; the M.S. degree in Chemical Engineering from the University of Pennsylvania, and in 1981 his Ph.D. in Chemical Engineering from Columbia University.

Dr. John was a research engineer in Princeton, N.J. in the Central Research Division, Mobil Research and Development Corporation before coming to Tulane. Other research activities include summer work in 1978 at the Institute of Gas Technology. In 1978-79 he was the recipient of a Columbia University Graduate Fellowship.

Dr. John’s areas of specialization are experimental and theoretical thermodynamics, applied statistical mechanics, heterogeneous catalysis as applied to Fischer-Tropsch Chemistry. He has co-authored several articles published in journals and has presented papers at professional meetings.

GEORGE DROUANT received his Bachelor of Science in Engineering Science with a concentration in Electrical Engineering from the University of New Orleans in 1974. In 1979 he received the Master of Engineering degree in Electrical Engineering from Tulane University. In mid-August of this year he became an instructor in the Department of Electrical Engineering. Previously, Prof. Drouant was with South Central Bell in the area of transmission Engineering - Microwave Transmission. Before that he was an instructor of electrical engineering technology at Delgado Junior College (West Bank Campus).

Prof. Drouant’s interests include hardware and software development for microcomputers.

EAIK EKEN, an Instructor in the Department of Electrical Engineering since mid-August, comes to Tulane from Michigan Technological University where he received his Master of Science degree in Electrical Engineering in August. He received his B.S. in Electrical Engineering in 1980 from the same university.

While at Michigan Technological University, Prof. Eken served as a graduate teaching assistant and as a graduate research assistant, both in the Electrical Engineering Department.

Prof. Eken is presently doing research in the area of underwater acoustic propagation and analysis, working on a project entitled “Underwater Acoustic Modeling.”
School Notes . . .

A TRIBUTE TO DANIEL H. VLIET

On July 1, 1981, after 16 years, Daniel H. Vliet, P.E., resigned as Executive Secretary of the State Board of Registration for Professional Engineers and Land Surveyors. The October 1981 issue of the LOUISIANA ENGINEER, the official publication of the Louisiana Engineering Society, was dedicated to this man who served the State Board so faithfully.

Dr. Vliet received his B.S. in Electrical Engineering from Tulane University in 1949, his MSEE from the University of Michigan and the Ph.D. in Electrical Engineering from the University of Wisconsin in 1965. He has been teaching at Tulane since 1949 and had visiting teaching appointments at MIT and the University of Wisconsin. He is presently Acting Head and Professor in the Department of Electrical Engineering.

Dr. Vliet has long been active in many professional and technical societies: the Louisiana Engineering Society (life member), NC/EE/ABET committee, Power Engineering Society to name but a few.

He is also the recipient of numerous awards, several being the NSF Faculty Fellowship, Society of Tulane Engineers Award for Teaching Excellence and the LES Charles M. Kerr Public Relations Award.

Dr. Vliet resigned as Executive Secretary to devote his time to his first love, teaching.

In Memoriam

Edward Hooper Harris (born October 29, 1915) died at age 86 (July 22, 1982), approximately one year after his retirement (June, 1981) as Professor Emeritus of Mechanical Engineering at Tulane University.

He earned B.S. degrees in both Civil and Electrical Engineering from the University of Alabama in 1936 (at age 21). During the subsequent 15 years he held a variety of engineering positions with several very different firms involving the design and construction of buildings, highway bridges, offshore platforms (in Venezuela), and armaments for the U.S. Military during WWII.

Later, he enrolled as a graduate student in Engineering Mechanics at the Johns Hopkins University and earned the Master of Science degree in June, 1952. He was appointed Assistant Professor of Mechanical Engineering at Tulane University in 1955, promoted to Associate Professor in 1957, and to Professor in 1964. During his tenure as Professor of Mechanical Engineering he was also an Adjunct Professor in the departments of Philosophy (uptown) and Anatomy (Medical School).

Shortly after the Ph.D. program was approved for the Mechanical Engineering Department he initiated a Ph.D. program in Bio-Medical engineering. That program flourished and was the forerunner of the present Bio-Medical Ph.D. program in the department of that name. Students were required to complete the first year of medical school (downtown), in addition to the regular requirements for the M.E. departmental Ph.D. program. They regularly taught several graduate courses that were popular with graduate students in both M.E. and C.E.

In 1970 he was one of the three (with H.A. Thompson and D.C. Hamilton) who conceived and initiated the "Early Bird" graduate program in M.E. that was quite successful for several years.

His friends who knew him well will remember him, not only as a competent engineer and teacher, but as the finest of gentlemen, and as one who had the rare quality of living with grace. He is survived by his wife, Anne, three sons, and one grandchild.
School Notes . . .

New Computer Science Department Head

DR. LARRY H. REEKER will join the Computer Science Department November 1, 1982 as Professor and Head of the Department.

Dr. Reeker received a Ph.D. in computer science from Carnegie-Mellon University in 1974; his B.S. in Mathematics and Philosophy is from Yale University. He has done additional graduate work in linguistics, logic and industrial administration.

Dr. Reeker began his academic employment as Visiting Lecturer in the Department of Computer Science at the University of Pittsburgh. He then went to The Ohio State University as Assistant Professor in the Department of Computer & Information Science and in the Department of Linguistics, and at the University of Oregon was Assistant Professor. At the University of Arizona Dr. Reeker was Assistant Professor of Computer Science. He is coming to Tulane from the University of Queensland (Australia) where he is Reader and Head, Department of Computer Science.

Professor Reeker’s areas of research interest include computational linguistics and models of learning, programming languages, formal language theory and related areas of automata and recursive function theory and psychological and economic factors in software development management.

Dr. Reeker has numerous publications and has received many grants for research.

We look forward to his arrival later this fall.

IBM Funds Fellowships Program

Early in the academic year 1981-82 the University was informed of a decision by International Business Machines to endow a fellowship program in the School of Engineering. The total endowment will amount to $400,000 and will be paid in five equal annual installments. The first installment arrived at the University last November. When the full amount of the grant is invested, we shall be able to support six students annually.

This kind of grant was selected by IBM because of the adverse impact which declining United States production of doctoral graduates is having on the quality of engineering education. By means of such grants academic careers may be made more attractive to talented B.S. level engineers.

The program supports graduate students in Computer Science, Electrical Engineering, and Mechanical Engineering. Earnings on the grant will pay stipends to students seeking Ph.D. level degrees, with particular emphasis on individuals having interests in academic careers. The University will provide a waiver of tuition to those selected as IBM fellows. Because of this program, the number of high quality doctoral graduates in Computer Science, Electrical and Mechanical Engineering should be increased, as the financial sacrifice required of graduate students will be lessened by the availability of the stipend and waiver.

The first student has already been selected. He is Mr. David M. Johnson. Mr. Johnson will be enrolled in our Computer Science program in the coming Fall semester. His grade point average is 3.39. He is an outstandingly well-qualified young man, having graduated last Spring from Washington and Jefferson University.

Exxon education foundation establishes faculty support program in celebration of its centennial year: 1982

The Exxon Corporation initiated a special program to aid selected universities in the development and retention of engineering faculty. As a part of that program, Tulane received Exxon Teaching Fellowships in Chemical and Mechanical Engineering. Each Fellowship consists of the award of $100,000 over a five year period. The funds are to be paid in equal annual installments and used for recruitment, retention and development of junior faculty. This program has been initiated by Exxon in recognition of the declining U.S. production of Ph.D. degree recipients and the potential impact of that decline on the quality of engineering education in the United States.

At Tulane, the monies will be used as salary supplements to attract and support junior faculty particularly those who have not yet attained a tenured position.

Inventions . . .

Biomedical engineers design shoes to walk on water

At the beginning of the fall semester, the thirty-six students in BME 403, Design and Analysis, were given an unusual assignment: build a pair of shoes for walking on water. They were allowed to work in teams of 2, and the rules were that no more than $60 could be invested in the project; hands couldn't be used; they had to remain in a single 1-meter wide lane of the pool when they walked across; and only their feet and ankles could get wet in the process.

The proof of performance came on Saturday, October 24. More than two hundred spectators showed up to see whether the students could re-enact this legendary "feet," albeit with a little mechanical help. About half the students traversed the surface of the pool without falling in, though for the spectators and TV cameramen, the falls were the best part of the event. Roger Mathis (from Baytown, TX) and Eugene May (from New Orleans) were the winners, crossing the pool in 35 seconds, with Patrick Moligan (from New Orleans) coming in second at 39 seconds on a pair of shoes built from 4" PVC pipe and urethane foam. The Biomedical Engineering Society provided the beer and hotdogs to keep the contestants and spectators at the peak of excitement, and Professors David Rice and Cedric Walker proclaimed that everyone who walked all the way across the pool earned an "A" on the assignment.
School Notes . . .

CRONVICH

James A. Cronvich has retired after forty-four years of truly outstanding service to the School of Engineering. The School and many successful electrical engineers recognize that they owe Professor Cronvich debts that can never fully be paid.

During the past twenty-six years Professor Cronvich has led the Electrical Engineering Department in its development of one of the nation’s strongest undergraduate programs in electrical engineering. It is a demanding educational program, one that recognizes the importance of experimental laboratory work and of the ability of students to express their thoughts clearly in reports and other communications. Professor Cronvich deserves more credit than anyone else for the strengths of the program in these areas. The undergraduate electrical engineering laboratories are in excellent condition because of the efforts of Professor Cronvich and a recent major bequest from Pendleton Lehde.

The Board of Administrators of the Tulane Educational Fund recently appointed James A. Cronvich, Professor Emeritus of Electrical Engineering. Before his retirement Professor Cronvich was Professor of Biomedical Engineering in the Medical School. The research work he performed in cardiovascular instrumentation for the Department of Medicine resulted in the publication of about forty technical papers and a book. Professor Emeritus Cronvich is planning to continue some work with both of his departments in the years ahead.

The Faculty of the Electrical Engineering Department, Dean Thompson and former Deans Johnson and Macdonald recently held a dinner party to honor Professor Cronvich. In addition to receiving several conventional gifts (including the gold watch), Professor Cronvich received a gift certificate for his selection of “one metric ton of used, often abused, surplus tube-type electronic equipment.” The EE Faculty knows that Professor Cronvich has the interest, knowledge and ability to make good use of such items. Certainly no member of the faculty can repair electronic equipment better than Professor Emeritus Cronvich. For many years he was not only the Department Head of Electrical Engineering, he was also its unofficial Electronics Technician.

On July 1, 1982, Professor Daniel H. Vliet was appointed Acting Department Head of the Electrical Engineering Department. Dr. Vliet is a Tulane graduate and has been teaching since 1949. During the next few years the faculty of the Department intends to expand the graduate education and research programs while it continues to improve its excellent undergraduate program.

MODERNIZATION OF CHEMICAL ENGINEERING LABORATORIES AT TULANE

by R.V. Bailey

In December, 1981, the Shell Companies Foundation made a donation of $796,600 to Tulane University for a Shell Modernization Fund for Research Facilities in chemical engineering.

The proposed acquisition consisted of the following:
1. Pilot plants which could be operated under manual or computer control in our Unit Operations Laboratories;
2. Small, portable microcomputers for data acquisition, reduction, display and experimental control;
3. A central processing computer capable of supporting data analysis, program development, control and interactive design;
4. The necessary analytical equipment to support the above facilities.

Five DEC MINC microcomputers, implemented for data acquisition and control, have been installed and are fully operational. They are currently being used for three doctoral dissertations in control. In addition, this facility is currently being used as a laboratory in two control courses which serve both undergraduate and graduate students.

COMPUTER SCIENCE DEPARTMENT ADVANCES

by Mark Benard

The Computer Science Department has just completed the first phase of a five-year plan which calls for a substantial increase in faculty, students, space, and equipment. For 1982-83, the Department has added 2 new faculty members, bringing the total full-time faculty to 8 as compared with 2 when Computer Science was granted departmental status 3 years ago. Renovations have been completed in Stanley Thomas Hall to house the new faculty members and a complete renovation of the third floor of the Richardson Building will give the Department laboratory space and graduate student office space later this fall. Perhaps the most exciting addition to the Department (certainly in the eyes of the undergraduate majors) is the acquisition of a VAX 11/780 computer system for exclusive use of the Department. Currently there are 48 time-sharing lines available for use by students beyond the introductory course and by faculty and graduate students in their research. New terminals for the system include many with graphics capabilities.

Both the undergraduate and graduate programs have substantially increased enrollments. For the past several years, approximately 20-25 seniors have completed either the B.S. Computer Science or B.S.E. Computer Engineering program each year. This year’s senior class is of comparable size, but each of the junior and sophomore classes exceed 50 majors.

Three years ago fewer than 10 graduate students were enrolled in Computer Science. This fall there are 14 full-time and 30 part-time graduate students. Most are enrolled in either the M.S. or M.E. programs, but some are working on the Ph.D. degree.

The goals of the five-year plan include a faculty expansion to 17 and an increase in the undergraduate major population to 65-70 B.S. and B.S.E. graduates per year by 1986-87. Graduate enrollments are projected to increase to 40 full-time and approximately 60 part-time students. To accommodate and support this expansion, additional space and additional equipment will be added during the next few years.

The objective of this plan is to bring national recognition to Tulane and the School of Engineering in a field which is of much attention now and which is expected to grow in importance for at least another 20 years. This objective is consistent with the School of Engineering’s commitment to quality and to President Eamon Kelly’s goal of establishing Tulane as one of the nation’s truly outstanding universities.

(Continued on Page 9)
School Notes...

(Continued From Page 8)

An experiment has been interfaced with the control computers. It consists of liquid level control in a series of tanks. This higher order and interactive system is particularly suitable for laboratory control studies.

A liquid-liquid extraction column is currently being interfaced with the computers. The system should be operational by the end of October.

Custom fabrication of a continuous distillation column is in progress and delivery is expected in October. All equipment for computer interfacing is being installed prior to delivery.

The central processing computer consists of a VAX 750 with 2 megabytes of memory and 32 ports. It has been delivered and is being installed. In addition to the nine VT-100 terminals, there are 5 terminals and the associated software for a General Imaging Generator and Interpreter package. The latter will be used in interactive design. As soon as time permits, the laboratories will be connected to the VAX computer.

A fully automated pilot plant for reaction kinetics and catalysis is being constructed. Delivery is scheduled for December, 1982. This unit has integral chromatographs for analysis and is designed to operate unattended and under computer control. Operating conditions include pressures to 1500 psi and temperatures to 700 C.

An adsorptomat (for surface area of catalysts) and a mercury porosimeter (to characterize the pore structure of catalysts) have been installed and research projects initiated.

A Coulter particle size analyzer and an atomic absorption spectrophotometer (for inorganic analysis) are in place. Initially, these units will be used in studies on catalysts and for studies on separations processes involving selective precipitation.

A research grade chromatograph is scheduled for delivery in September. The microcomputer control on this equipment will be connected to the larger computer. This facility will support instruction and research in a variety of areas.

As time permits, a variety of other experiments, especially unit operations, will be interfaced for computer operation, control and data acquisition.

PLACEMENT OF MAY GRADUATES

Although the poor economic situation slowed the frenzied recruiting activity of the last several years, placement of May graduates remained at a high level. A total of 154 students received Bachelors degrees in Biomedical, Chemical, Civil, Mechanical, and Electrical Engineering as well as Computer Science and the Engineering Curriculum. Approximately 40 per cent accepted industrial employment; a total of 61 students went to work, predominantly in the petroleum industry. However, for the second consecutive year, computing industries ran a strong second in hiring Tulane graduates, with defense related corporations making a significant reappearance after a prolonged period of low profile operations.

Those companies hiring the greatest number of graduating seniors were Chevron, U.S.A., followed closely by IBM and Texas Instruments. Other major oil companies included Exxon, Gulf, and Shell. From the chemical area, American Cyanamid and the Olin Corporation. The petroleum service area was represented by Welex, and the consulting area by Waldemar S. Nelson and Company. Electrical energy was dominated by Louisiana Power and Light Company.

Approximately 17 per cent of our graduates elected to attend graduate school; more than half in engineering programs. This is a greater percentage than has been the case in the last decade. This trend may be of significant help to engineering education where declining numbers of Ph.D.'s awarded to U.S. Citizens has made it difficult to hire young faculty. A return of top graduates to post-graduate training should substantially improve the environment not only in teaching, but in industry and government where needs for research trained individuals have been increasingly frustrated by short supply.

More than 12 per cent of our graduates accepted commissions in one of the branches of the military service. This reflects an increasing level of military activity as all branches of the ROTC intensify their search for technically trained manpower. For example, at the present time a federal stipulation placed on all ROTC detachments is that 50 per cent of their cadets have to be engineering or science majors.

Approximately 7 per cent of the graduates were undecided between two or more offers at the time of graduation. Although a decade ago there were few students in this category, the number has become significant since approximately a quarter of our undergraduate students are women.

Fourteen per cent of the graduates did not respond to our questionnaire. Almost four per cent of the 1982 spring graduates were foreign nationals who have to return home in order to find employment and so we lost track of them immediately.

Finally, six per cent of the graduating class reported that they had no offers at the time of graduation. This is up by a factor of more than two over the last three years and reflects in part the deteriorating economic situation.

Although demand for engineering graduates was less frantic than in the past, salaries continue to escalate at significant rates. The average offer in early March was $26,832. The reported range of offers extends from a lower value of $15,000 to a whopping $40,200 figure. This is approximately a ten per cent increase over average salaries offered last year.

Engineering continues to remain an exciting and lucrative career opportunity for graduates. The declining outlook for capital investment in major projects may become a problem if the economy does correct in the near future. However, at the moment computing and aerospace have offset some of the declines in hiring by the petroleum industry.

ALUMNI NEWS

Marx Issacs, Ch.E. '29, received the F.J. Van Antwerpen Award for 1981 for his service to AIChE. He is Southwest Editor of "Chemical Processing" and works as a consultant in technical writing and editing.

Henri J. Molaison, Ch.E. '32, was retired from McDermott December 1979 but continues to work for them on a contract consultant basis.


Shep Perrin, Ch.E. '42, served as the Executive Director of the Louisiana Superport Authority from August 1975 to August 1981. Currently, he is Director of Business Development for Pyburn & Odom and Odom Offshore Surveys, Inc., in Baton Rouge.

(Continued on Page 10)
Dale Stancliff, CE '43, is Chief Architect for the San Francisco United School District in charge of both maintenance and new construction.

Herman "Dutch" Prager, Jr., ME '46, is president and CEO of Prager, Inc., the largest gear cutting and machine repair plant in the South-Southeast.

Charles A. Bender, Jr., ME & EE '48, was honored by the Society of Automotive Engineers in recognition of more than 35 years of active membership. He is retired from Gulf Oil Corp.

Nicholas J. Gagliano, EE '48, withdrew from active law practice in September 1981. He now serves as Vice President for Business Development for Mechanical Construction Co. of New Orleans, Inc.

Edward A. Chmielinski, ME '50, is President and CEO of Lewis Engineering Co. in Naugatuck, CT.

C. Walker Weston, Jr., EE '50, has been elected president of the Fluid Power Distributors Association, an international trade association.

Hugh J. Davis, Ch.E. '51, is back in the U.S. after 29 years as a consultant engineer out of the country. He is now Export Division Manager for Louisiana Chemical Equipment Company, Inc.

Pierre Cordell-Reeh, CE '52, served this past year as President of the American Society of Military Engineers.

Charles H. Robards, EE '55, has been recalled to active duty from Reserves as a colonel. He presently serves as Reserve Advisor to TAC Commander at TAC Headquarters, Langley Air Force Base, VA.

Harry Lederman, ME '58, is the father of Michael Ann Lederman, a senior Biomedical Engineering student at Tulane.

Richard J. Floreani, EE '61, is a captain for Continental Airlines flying to New Zealand and Australia. His oldest son, Randy, is enrolled in engineering at Oregon State.

Jose' A. Fernandez, Jr., CE '70, works in Puerto Rico as a project manager for the construction of water and sewage treatment plants.

Thomas L. Jackson, CE '70, MCE '74, has served as president of the Louisiana Section of ASCE this year. His work included organizing their annual convention in New Orleans.

George C. Kleinpeter, Jr., CE '70, MCE '74, has served as 1982 president of the New Orleans branch of ASCE.

Roger Vincent, CE '70, is the proud father of Margaret Lillian Vincent born October 22, 1980.

Walter Lee Murfey, II, Ch.E. '72, has four children and is a major assigned to the U.S. Army Aviation Center, Fort Rucker, AL, as an operations research analyst.

Taylor J. Casey CE '76, currently serves as President of the Louisiana Chapter of the National Association of Industrial and Office Parks.

Frederick P. Heisler, Jr., ME '76, is employed by Martin Marietta Aerospace as Lead Engineer, Transportation and Support Equipment, Manufacturing Engineering.

Edward Breland, CE '78, and his wife Kathy are proud to announce the birth of their first child Christopher Chase Breland on 22 April 1982.

Kevin P. Bourgeois, CE '78, separated from the army at the rank of captain after serving four years. He has returned to New Orleans and is employed by Gulf Oil Company as a Project Manager.

Randy Eustis, CE '78, and his wife Lizby are proud to announce the birth of their first child Pauline Street Eustis on 13 January 1982.

Mike Joseph, CE '78, and his wife Mary are proud to announce the birth of their first child Michael Jason Joseph in May 1982.

Chip Muller, CE '78, and his wife Leigh are proud to announce the birth of their first child Daryl Andrew Muller on 13 October 1981.

Annette Bergeron Oertling, Ch.E. '78, was recently named "1982 Young Careerist" by the New Orleans Chapter of the Business and Professional Women's Society. She is also the newly elected President of the New Orleans Chapter of the Society of Women Engineers.

M. Todd Ridgeway, CE '79, is proud to announce his marriage to Todd Taylor (a Newcomb graduate) on 5 September 1982.

P. Carey Love, CE '80, is proud to announce his marriage to Raghnild Dahle on 14 August 1982. They are currently residing in Aberdeen, Scotland, where Carey is employed by SEDCO.

Emily C. Verges, CIS '80, is employed by the City National Bank Computer Center in Los Angeles as a quality assurance analyst.