

E&T MODEM

A newsletter for faculty, students, alumni & friends of the McNeese College of Engineering & Technology.

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E&T MODEM UNDERGOES CHANGES

The last issue of the E&T Modem was published through the Office of Media Services. Costs associated with outsourcing, printing, assembly, bulk processing and mailing, led to the decision to prepare the Modem in-house and make it available online. We are grateful to the McNeese Alumni Association for informing their readership through their newsletter that this publication would be available online in December and May. Please inform any other alumni that you can contact, and who may not have gotten the word, that they can access the Modem online at the following web address: <http://www.mcneese.edu/colleges/eng/etmodem/eandtmodem.pdf>. You can also print out this publication and pass it on to interested readers.

We ask all E&T alumni to keep us posted on their activities and accomplishments so that we may include that information in future issues. Please send all such information to: MSU Alumni Office, P.O. Box 90775, Lake Charles, LA 70609 or e-mail to info@mcneese.com. Please also send a copy to: Dean of Engineering & Technology, MSU Box 91735, Lake Charles, LA 70609 or e-mail to ckarkal@mcneese.edu.

COMMENTS FROM THE DEAN AND DEPARTMENT HEADS

O. C. Karkalits, Dean, College of Engineering & Technology:



Enrollment in the graduate program in engineering is at an all-time high of 78 students. Undergraduate enrollment in both engineering and technology is essentially the same for the fall 2004 semester as in 2003. Recruiting efforts continue with presentations to high school groups and department activities such as the engineering week open house. Graduates of all of our programs are encouraged to do what they can to inform prospective students of the advantages of attending McNeese for an engineering or technology degree.

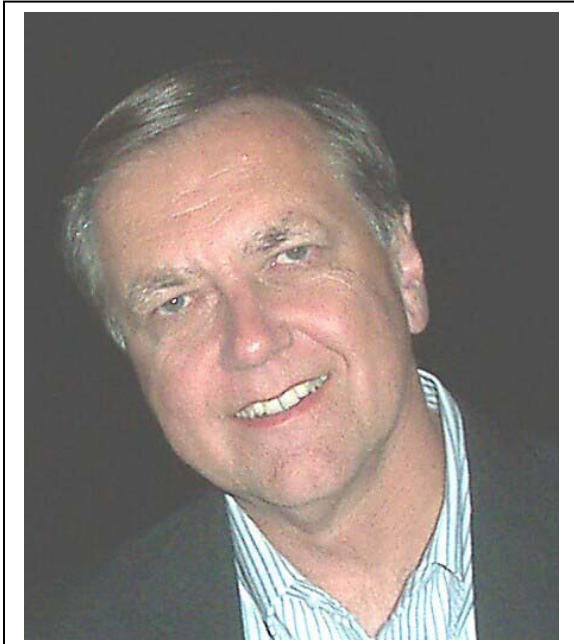
Dr. Joseph Richardson was awarded a Fulbright Scholarship to teach and do research in Rwanda. Dr. Tom Fenske was hired as a full-time Assistant Professor to fill his vacancy. Dr. Valentine is working on

professional development while on sabbatical leave. Dr. Jing Guo was hired as a full-time Visiting Lecturer for one year to fill that vacancy.

Congratulations to the MSU ASCE Chapter and students who traveled to the ASCE Deep South Conference last spring. Student representatives of fourteen universities from Texas, Arkansas, Mississippi and Louisiana were in attendance. Dr. Jay Uppot is the advisor to the student group from McNeese. He may be contacted at juppot@mcneese.edu or by phone at 337-475-5868.

A total of \$845,000 has been raised toward the goal of \$2,000,000 for the College of Engineering and Technology Endowment. With more than 2,000 E & T alumni, each should contribute toward the endowment goal. Local industries are doing their part, and your help is needed to fulfill the endowment fund goal. The endowment drive will continue until the goal is reached. Interest from the endowment is to be used for graduate student stipends, undergraduate faculty assistants, scholarships, matching grants, research development, recruiting of women and minority students, summer school programs for middle school students, and faculty salary supplements and professional development. Contributions are tax deductible and may be sent to the MSU Foundation account #02799 at P. O. Box 91989, Lake Charles, LA 70609.

Fred I. Denny, Head, Department of Engineering:



The Engineering Department continues to emphasize close and personal contact with students in providing chemical, civil, electrical, and mechanical engineering education. Our graduates have proven that they can compete with graduates from other universities in industrial positions and in graduate schools. Our program focuses on the industrial needs of our region, and our faculty has a great deal of contact with engineering practitioners. Our faculty has more industrial experience and a higher percentage of licensed professional engineers than the engineering faculty at most other universities. We are primarily a teaching program, not a research program, although our faculty members have excellent scholarly credentials.

Several challenges are on the horizon. Currently, there are 376 students in our undergraduates engineering program, and that number remains relatively constant. However, during the last several years, the number of students in our graduate program has increased exponentially. We now have 78 graduate students pursuing the Master of Engineering Degree in one of five available concentrations (engineering management, chemical, civil, electrical, or mechanical engineering). If the current growth rate continues, the number of graduate students will be over 100 by the beginning of the fall 2005 semester. One of our challenges is to adjust to this rapid growth and assure that the Master of Engineering at MSU is a quality program.

Another challenge is to change the way we approach the assessment of the quality of our educational program. ABET, the Accreditation Board for Engineering and Technology, now focuses on the assessment of educational outcomes as well as the necessary inputs (number of faculty, number of design courses, etc). In 2005 we will continue efforts begun in 2004 to change the way we define our program and course objectives as part of our goal to adopt and implement the new ABET approach.

Next year the university will begin preparing for a comprehensive evaluation by the Southern Association of Colleges and Schools (SACS). SACS is also moving toward outcomes assessment and will review both our undergraduate and graduate engineering program.

We are developing better surveys and new approaches for communicating with our students, our alumni, our advisory groups and the Southwest Louisiana industrial community. It is vitally important that we maintain connected with these stakeholders. We also welcome dialog regarding our program with anyone who reads this newsletter!



James Dautenhahn, Head, Department of Technology:

The Department of Technology is adapting to changes in personnel in the classroom and in the community. On the personnel front, David Slay retired for the second time this summer after teaching full-time for the past three years. We welcome back Mike Stockwell who earned his Master's degree in Electrical Engineering last year and is filling the vacant position during this academic year. The search for a tenure-track replacement for next fall will begin shortly. As always, we will be looking for applicants with a technical Master's degree and relevant industrial experience to be able to teach both theory and its practical application.

In the classroom, we are moving toward "outcomes-based" instruction and

assessment. Outcomes are the skills and abilities that students need to demonstrate by the end of the class (for course outcomes) or when they complete a degree program (for program outcomes). Instruction then becomes geared toward making sure the students develop the desired skills and abilities to demonstrate they have met the outcomes. In addition to grading individual students, the faculty now assess how well the students as a group met the outcomes for a course and how this performance reflects on the program's outcomes. The Process Plant concentration is the first to develop and assess outcomes as we prepare for ABET accreditation evaluation visit of the B.S program this fall (all other programs were accredited two years ago under criteria that did not require outcomes assessment). Although our accreditation bodies are requiring outcomes assessment, the faculty feels it is a good way to document the things they have always done to ensure student success and continuous improvement in the classroom. We are confident that the changes made, based on outcomes assessment, will better prepare our graduates for the workplace.

The department is also making an effort to have a greater presence in the community. This decision was made to try to reverse the enrollment decline seen in recent years. Dorothy Ortego hit the road last year to inform high school students about our programs. As a result of her recruiting efforts we had more students entering this fall than last year and expect a larger increase next year since most of the students visited last year were juniors. Brent Garner has taken over recruiting duties this year to make sure we get a fresh message out. Dorothy Ortego also facilitated a Process Technology camp for high school girls over the summer. After a week of learning about operations careers, visiting plants and operating equipment most of the girls said they would seriously consider a career as a plant operator. Many thanks to Dorothy, local industry and the state process technology coordinators for making this camp a success. In short, the Department of Technology is continuing to do everything it can to provide quality education to its students, produce graduates who will succeed in industry and let the community know we have quality programs that lead to good careers.

IN MEMORIAM

Dr. Yellappa C. Das: We are sad to report that Dr. Yellappa C. Das, Associate Professor of Civil Engineering, passed away on June 17, 2004 in Houston. Dr. Das joined the faculty of engineering at McNeese State University in 1990. He received his MS and PhD degrees in civil engineering from the University of Minnesota in 1962. He taught for one year at the University of Illinois, Urbana-Champaign, then returned to India to teach at the Indian Institute of Technology, in Kanpur where he became chairman of the department of civil engineering. After retirement from IIT, he worked for six years as a UNESCO expert in engineering education in Cairo, Egypt. He then came to the U.S and taught at the University of Ohio in Athens for two years and at Texas Tech University in Lubbock, Texas for six years, before coming to McNeese.

Dr. Das was an excellent teacher and well liked by his students. He was an expert in the field of engineering mechanics and has numerous publications to his credit. He was a scholar and a decent man who will be missed by his family and his students and colleagues at McNeese.

Dr. Das is survived by his wife Indira and their children, Hemi, Mohan, Shanti and their families, all of Houston.

PARTNERSHIP TO ATTRACT MORE STUDENTS TO MSU FOR BACCALAUREATE DEGREE IN PROCESS TECHNOLOGY

McNeese State University is the only school in Louisiana or Texas that offers a baccalaureate degree in Process Technology. A partnership between McNeese State University and Houston Community College-Northeast was formed to provide two-year associate degree graduates of HCC-NE an opportunity to continue their education at McNeese. The partnership is a result of a \$299,999 grant obtained from the National Science Foundation by HCC-NE and collaborative efforts between Nikos Kiritsis, associate professor of mechanical engineering at MSU and John K. Galiotos, head of the department of chemical technology/process technology/biotechnology at HCC-NE. Galiotos is the principal investigator and director of the grant. Kiritsis, Carol E. Schulte, associate professor of process technology at MSU and James Dautenhahn, head of the technology department, are co-principal investigators. Dorthy Ortego, assistant professor of technology at MSU, will be assisting with course development and delivery of courses via the web and compressed video.

The partnership, known as the Gulf Coast Technology Articulation Partnership, could include the 20 plus schools in Louisiana and Texas that offer the associate degree in process technology. Lee College of Baytown, Texas has already joined the partnership. Programs that join the partnership must be accredited by the Southern Association of Schools and Colleges.

According to Dr. Kiritsis, "The grant will provide scholarships, distance learning, visiting lecturers and implementation of a 'seamless pathway' for students to transfer to a four-year program. It will also provide opportunities for two-year graduates to pursue a bachelor's degree in their field. This, in turn, generates more well-rounded individuals, better compensation, improved communities and advances in the field of process technology." In addition, the project will provide increasing awareness for junior high and high school students and their parents about career opportunities in process technology.

EARN CEUs or PDHs FOR AutoCAD LT 2005 WORKSHOP

A hands-on workshop in AutoCAD LT 2005 will be offered through the Office of Continuing Education from 6:00-8:30 p.m. on January 11 and 13, 2005 in Room 229, Drew Hall. The workshop is especially recommended for those in technical fields who do or oversee design and drafting work. A general knowledge of computer operation, such as keyboarding, use of a mouse, and any type of software, is recommended. Drafting knowledge or skills are not required but would be helpful. Attendees can earn 5 CEUs or PDHs.

Topics to be covered include accessing AutoCAD, screen layout and menus; setting up drawing parameters; making templates; using the Draw, Modify, and Dimensioning commands; creating Blocks and accessing Libraries; how to Mirror, Rotate, Copy, Move, and Array; how to Modify with Offset, Extend, Trim, Fillet, Chamfer, Stretch and Scale; and Plotting.

Enrollment will be limited to the number of work stations available. Instructor for the workshop is Dr. Donald L. Elfert. For information concerning enrollment contact Eva LaBlanc in the Office of Continuing Education at McNeese State University. E-mail: eleblanc@mail.mcneese.edu Phone: 337-475-5127

E&T FACULTY & STAFF

A number of changes in faculty have taken place since the last Modem was published. These were necessitated because of retirements, resignations, sabbaticals, leave of absences and death.

Dr. Joseph M. Richardson, Associate Professor of Civil Engineering, is on leave of absence for the 2004-2005 school year. He has been named a Fulbright Scholar to lecture on civil engineering and conduct research at the Kigali Institute of Science and Technology in Kigali, Rwanda. He is only the sixth McNeese faculty member to receive a Fulbright Scholar award. Those interested in learning more about Dr. Richardson's experiences in Rwanda can log on to the following web site: www.banners.org then click on Rwanda.

Dr. Jay Uppot, Professor of Civil Engineering, is working with TETRA Technologies of Westlake on a collaborative research project on stabilization of soils for road construction using calcium chloride. Graduate student Naresh Kolli is assisting in the research which will be a basis for his thesis. The LA DOTD supports this research project at McNeese and, based on the findings, could use this method in highway reconstruction.

Dr. Uppot has also been awarded the Pinnacle Excellence Award for the College of E&T for 2004. Dr. James Dautenhahn was awarded the Pinnacle Excellence Award for the College of E&T in 2003. One recipient from each college is selected through a competitive process for the \$5000 award which recognizes outstanding performance in classroom instruction and student mentoring. Dr. Uppot has been at McNeese for 18 years. He is currently LA Contractors Endowed Professor of Civil Engineering, Curriculum Coordinator for Civil Engineering, Director of Engineering Graduate Programs and Faculty Advisor to the Student Chapter of the American Society of Civil Engineers.

Dr. Bruce Savage joined the McNeese faculty as Assistant Professor of Civil Engineering in the fall 2003. Dr. Savage earned his BS, MS and PhD degrees from Utah State University in 1992, 1998 and 2002 respectively. The MS and PhD were in Civil and Environmental Engineering. He worked as an environmental engineer for the Public Health Service, Indian Health Service from 1992 – 1995. He was a Visiting Assistant Professor at Bucknell University for the 2002-2003 academic year. His specialties include water resources, fish passage, computational fluid mechanics and physical modeling. He also teaches the freshman engineering graphics course.

Dr. Jing Guo was hired as a full time Visiting Lecturer in Electrical Engineering for the 2004-2005 academic year. She is filling in for **Dr. F. Therrell Valentine** who is on sabbatical. Dr. Guo received her bachelor's degree in electrical engineering from Beijing Polytechnic University. She earned her master's degree in electrical engineering from Beijing Control and Electronic Technology Research Institute, China and the doctor of engineering degree in electrical engineering from Lamar University in Beaumont, Texas in 2003. She served as a visiting faculty member at Northern Arizona University in the spring of 2004. She also worked for three years as a research engineer in Beijing, China. Her research interest are signal and image processing, digital video processing, wavelets

applications and control systems. Her teaching interests include digital signal processing, communication systems and circuits.

Dr. Tom Fenske was hired as a full time Assistant Professor in Civil Engineering for the 2004-2005 academic year. He is filling in for Dr. Das who passed away during the summer. Dr. Fenske holds a Ph.D. degree in Civil Engineering from Purdue University, is a registered professional Civil and Structural Engineer. He has over 20 years experience in both the design and research/academic environments which includes both commercial and industrial buildings throughout the United States, the Middle East and the Far East. His designs span the spectrum of structural works with such projects as schools, churches, highways, bridges and mechanical systems. He has produced over 100 publications and reports which focus primarily on either computer usage in structural analysis and design or structural dynamics and is a nationally recognized researcher/ academic instructor in this area. He was instrumental in the development of CADD/CAM software for the world's largest building manufacturer.

Henry Orsot is the Mechanical Technician for the College of Engineering and Technology. Mr. Orsot is retired from Conoco where he was a an operator, a Construction Coordinator, welder and pipe fitter. He also completed instrument technician, fiber optics and electrician school. He is the father of Rico Orsot (CE 1993) and Brad Orsot (ET 2001). He replaces **Mr. Will Hegener** who retired.

Ramona O'Brien was hired for the new position as Computer Technician for the College of Engineering & Technology. She is responsible for maintaining all workstations and file servers in the departments, working with users to resolve network issues and software problems, troubleshooting hardware and software issues, researching and recommending hardware and software applications to aid in teaching and research, and writing grant proposals. She also serves as the interface between the departments and the McNeese Information Technology Office and the IT Strategic Planning Committee.

Mrs. O'Brien earned her B.S. degree in Computer Science and Business from the University of West Florida. She was previously employed as Director of Computer Operations for the 24th Special Forces Unit at Pope AFB, NC; Systems Analyst at Fort Bragg, NC, Fort Polk, LA; and Gunter AFB, AL.; Systems Specialist at Fort Rucker, AL.; Systems Programmer on the Cobra Flight Simulator and Programmer Analyst for Eckerd Corporation. She also did professional information systems support for the Third Circuit Court of Louisiana and computer contract work for CITGO in Lake Charles.

Paul Letz is Electronics Technician for the College of Engineering & Technology. His position now comes under the administration of the Technology Department.

E&T GRADUATES

Terry W. Ward (M.E., 1989) has been elected Vice President, Minnesota Operations, Boise Paper Solutions. Terry joined Boise in 1989 as an engineer at their pulp and paper mill in DeRidder, Louisiana. From 1991 to 2003, he worked in a variety of capacities at Boise's pulp and paper mill in Wallula, Washington, including the position as Mill Manager. He served as Region Manager, Minnesota Operations, since June, 2003.

Catherine Wingstrom (M.E., 2001) accepted a position at the Transitions Optical Plant in Pinellas Park, Florida, a world leader in photochromic technology. She will work as a Production Engineer in the application of photochromic dyes and various coatings to blank lenses to produce transitions optical lenses. Catherine was active in student professional organizations and a co-op

engineer at PPG when she was a student. She went to work for PPG in production and logistical functions in the sodium hydroxide production units for three years before her transfer last July.

April Nesbitt Herrington (M.E., 1999) spent two years in the Ford College Graduate Program immediately following her graduation from McNeese. She rotated through different divisions of the company, including research and development, plant vehicle team, design and release engineering and project management. After completing the two year training program she was assigned to the Brake Engineering Division where she became part of the 2005 Mustang Product Development Team. She has also worked on the Ranger and the new Ford 500. Her group is responsible for all Ford, Lincoln and Mercury products. The team supports meeting functional requirements of the brake system for durability and corrosion as well as designing for manufacture and service.

Rico Orsot (CE, 1993) works for PPG Industries as a Maintenance Supervisor. He is also an umpire official in the Southland Conference and NFL arena football. He is married to **Stacie** (Guillory) **Orsot** (CE, 1996) who is a Project Engineer at PPG. They have two boys, Aidan and Josh. Rico's younger brother, **Brad Orsot** (A.S. Electronic Technology, 1999 and B.S. Electrical/Electronics Technology 2001), is a Federal Express courier.

E&T STUDENTS

The Ole Miss ASCE Student Chapter hosted the annual meeting of the Deep South Conference of ASCE Student Chapters in Oxford, Mississippi March 25-27, 2004. The McNeese student chapter of ASCE placed first in two of the competitions – surveying and concrete canoe. **Clayton Cormier, Michael Hollier** and **Tyson Thevis** made up the surveying team. They completed the competition task in 13 minutes and 7 seconds – half that of the nearest competitor, and achieved an accuracy of 0.01 feet with no errors in field book notes. **Nicholas Pestello, Gregory LaFleur, Seth Woods, Clayton Cormier, Leigh Rush, Tyson Thevis, Michael Hollier, Steven Hollier, Chris Cabaniss, and Magen Daughdril** made up the concrete canoe team. Scoring for this competition was based on 25% each for the design paper, presentation, final product and racing. The design paper was titled “Cowboys don’t rite like they tauck.” The canoe had a hunting theme design and was named the “Poke Boat.”

Clayton Cormier, a Civil Engineering junior at McNeese, was one of ten recipients of \$1,000 Louisiana DOTD scholarships. Funds for the scholarships were provided by the Southeastern Association of State Highway Transportation Officials. SASHTO’s hope is that these scholarships will influence students to pursue a career in the transportation field.