

# the EXPLORER

NEWSLETTER OF THE COLLEGE OF SCIENCE AND TECHNOLOGY AT TEXAS SOUTHERN UNIVERSITY

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## EDITORIAL

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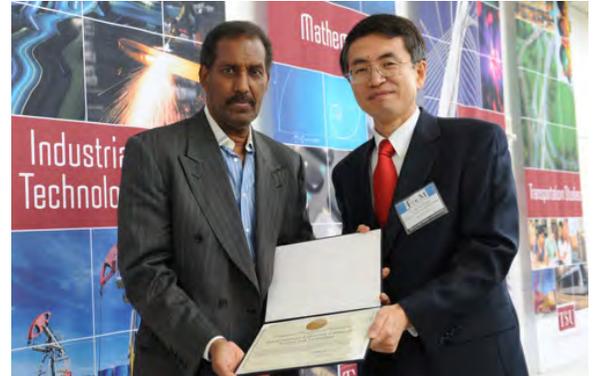
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*Photography*



Dean Lei Yu receiving certificate of congressional recognition

## COST STEM Awareness Forum Recognized by US House of Representatives

The aggressive efforts of the College of Science and Technology (COST) to improve and advance the participation of students in science, technology, engineering and mathematics (STEM) education were hailed in a proclamation of the U.S. House of Representatives initiated by Congresswoman Sheila Jackson Lee. The COST STEM Awareness Forum was held on Friday March 25th to bring into focus in the community the seriousness of the STEM workforce shortfall and the attendant issue of the

STEM student body shortfall. At present, only 6% of all 24-year-old Americans hold an undergraduate degree in STEM disciplines; for African Americans, Hispanics, and Native Americans, the percentage hovers at 2-3%. Even with the enormous amount of activity and emphasis in STEM education, the University still does not receive a significant number of students whose intent is to study STEM subjects. The objective of the STEM Awareness Forum was to make the community aware

of the national STEM crisis, discuss roles that STEM plays in the national economy and national security, and open a dialogue on possible effects and resolutions.

Speakers presented several perspectives on the issues; Professor Oscar H. Criner presented a view based upon research he performed while on a faculty development leave with AT&T Bell Laboratories; Mr. Jonathan Hall, Deputy Division Chief, Energy Systems Division, NASA Johnson

*(Continued on page 2)*



## STEM Awareness Forum.....

(Continued from page 1)

Space Center, presented the view of a hiring manager; Mr. Marc Mundo, CIO BP Energy, presented an industry perspective discussing the skills needed to work for BP Energy; Mr. Sam Denard, a professional engineer, presented a personal and community reflection on the environment needed to stimulate students into the study of STEM subjects.

Dean Yu provided an overview of STEM programs offered by the COST and Dr. David Drew gave a summary of the accomplishments of the TSU Houston Louis Stokes Alliance for Minority Participation (HLSAMP) program.

Other presenters at the conference were Dr. Nancy Tervalon, Mr. Joseph

Flowers, Dr. Marty Bonsangue, and Dr. Carlos Handy who gave short presentations in a panel. Luncheon keynote addresses were provided by Dr. Kumar Krishen, NASA Senior Scientist, and Mr. Frasier Wilson, Vice President of the Shell Oil Foundation.

The STEM Awareness Forum is the first of a series of conferences to be held by the College to drill-down into the issues of the shortage of STEM students at TSU. The next conference will be a two-day conference to be held in the fall with a formal call-for-papers, presentations, and panels. The announcement will be made in May.

*Dr. Oscar Criner  
Associate Dean, COST*



## A for Accreditation: ATMAE Visit

It seems like everyone in the Higher Education arena is looking for an "A." Of course in the classroom, we all know the meaning of an "A," but for administration, "A" stands for *Accreditation*. Over the last year the College has been involved with multiple accreditation efforts. These include the university's reaffirmation of accreditation from the Southern

Association of Schools and Colleges (SACS), the Department of Engineering Technology's efforts for re-accreditation from the Accreditation Board for Engineering and Technology (ABET) and the upcoming site visit to the Departments of Aviation Science & Technology and Industrial Technology by the Association of Technology,

## Confucius Institute at TSU

Dean Lei Yu facilitated the signing of a Memorandum of Understanding (MOU) between Texas Southern University and Beijing Jiaotong University (BJTU), Beijing, on December 10, 2010, for the two institutions to jointly establish a Confucius Institute at TSU. The institute will provide an opportunity for TSU to offer Chinese language curriculum and to increase the international experiences of its students. The institute will be housed in the College of Liberal Art and Behavior

Science (COLABS), and include certain elements of Science Technology Engineering, and Mathematics (STEM) in its curriculum.

TSU has a history of collaboration with BJTU. The delegation from BJTU that visited TSU on December 10, 2010 was led by the Chairman of BJTU's University Council, Mr. Guoyong Cao. The delegation discussed many potential exchange programs between the two institutions with President Rudley.



Management, and Applied Engineering (ATMAE).

The University's efforts with SACS are near completion as TSU hosted the SACS site visit team in early February '11. In December of this year, SACS will convene at its annual meeting to determine TSU's accreditation status. The Department of Engineering Technology's efforts for re-accreditation for its Electronics Engineering Technology program through ABET have been successful as continued accreditation from this

prestigious organization has been granted.

The Departments of Aviation Science & Technology and Industrial Technology are currently preparing for an upcoming site visit on April 10-12, 2011 from ATMAE, which shall review the currently accredited undergraduate programs in Airway Science and Industrial Technology.

Our hats are off to the faculty, staff and students who have, or are involved in these efforts. Your dedication to the College and University is deeply appreciated.

## COST Alumni Chapter Established

COST was formally recognized as an official chapter of the Texas Southern University National Alumni Association (TSUNAA) on March 2 2011, by Marcus Davis, President of TSUNAA. Prior to the TSUNAA business meeting held that evening, a reception was held in honor of COST and the College of Pharmacy and Health Sciences (COPHS). The certification process for COST started on May 9 2010, with an email from Dr. Lei Yu inviting representatives recommended by COST department chairs to participate in a steering committee formed to establish a COST Chapter of the TSUNAA. The first committee meeting was held on June 9, 2010 in the Science Center. Great enthusiasm was displayed at this meeting, and commitments to complete the task were fashioned.

Leading the committee was Mr. Perry Miller, Steering Committee Chair, Co-Chairs, Ms. Roben Armstrong and Ms. LaKeisha Melton, and a host of COST professors and graduates. Professor Paul Simmons (COST Advisory Board) and Ms. Connie Cochran, Director of Alumni Relations deserve special mention for their efforts in providing leadership and guidance toward the establishment of the COST Alumni Chapter. COST membership requirements are: graduation with a degree from one of the COST departments, satisfy requirements for TSUNAA membership, completion of a COST membership application and \$50 annual membership fees. The COST Steering Committee will continue meeting until chapter officers and by-laws consistent with TSUNAA requirements have been established.



## TSU Partners with US Coast Guard

Texas Southern University and the United States Coast Guard (USCG) recently signed a Memorandum of Agreement (MOA). For TSU, the MOA will establish a relationship with the USCG in support of higher education and ensure TSU students are knowledgeable of the USCG and its recruitment efforts. The partnership with TSU will strengthen the USCG's relationship with Historically Black Colleges and Universities and enhance outreach and recruitment of well qualified students in the areas of engineering, operations, logistics, and information services.

program and believe that it will enhance their educational experience. Other USCG programs in which TSU students may apply include the Military Officer Career Management Mentorship Program, Civilian Summer Internships, and the Government Civilian Career Management Mentorship Program.

TSU students will have an opportunity to apply for the USCG's coveted College Student Pre-Commissioning Initiative (CSPI) program. CSPI is a fully funded scholarship program, which may pay up to two academic years of college tuition, books, and essential supplies for full-time students. TSU Maritime students Dommonic Nelson and Sharda Sonnier attended the signing of the MOA. Both are interested in the CSPI

Since the inception of the maritime program at TSU, the USCG has been a partner and supporter of the program. Capt. Marcus Woodring, commanding officer of Sector Houston-Galveston and captain of the Port of Houston serves on the Maritime Industry Advisory Board and was a speaker at the maritime program's "A Sea of Opportunity Luncheon" last fall.

For information about the maritime program at TSU, contact Ursula Williams at 713.313.4394 or [williamsua@tsu.edu](mailto:williamsua@tsu.edu). For information about the USCG's CSPI program, contact Rosanna Hegemier at 713.641.3559 or [rosanna.hegemier@uscg.mil](mailto:rosanna.hegemier@uscg.mil).



**Congratulations to COST Faculty and Staff for 97% Participation in TSU Faculty and Staff Campaign**

## COST Holiday Celebration

Christmas in the College of Science and Technology was a magical time of year for the students, faculty and staff. With lights aglow and festivities planned for a grand holiday celebration, COST became the delight of the TSU campus. The theme for the celebration was "COST Candy Land." The atrium of the New Science Center was transformed into a neighborhood of candy, with a Christmas tree nestled in a snowy wintry setting. The Christmas tree was adorned with figurines/toys representative of each department in COST.

The celebration began at

12 noon and the faculty and staff celebration began at 3 p.m., affording everyone the opportunity to have a wonderful time and make it home to begin their Christmas break with family and friends. Guests attending both celebrations enjoyed musical entertainment by DJ 1231.

Dr. Carlos Handy, grandson of history-making William C. Handy, performed with the HR Duet rendering a medley of Christmas and Gospel songs during the intermission between the student and faculty/staff celebrations. Host, Dr. Robert Ford, introduced the entertainment with

performances from COST faculty and staff; highlighted by comedy from Dr. James DuMond, magic tricks by Dr. Lei Yu, Dean of COST and the baritone voice of Dr. Oscar Criner reading the all-time favorite poem, "Twas the Night before Christmas." Both celebrations climaxed with line dancing.

Gifts, provided by each department and the Dean's office, were presented as door prizes to lucky winners at both celebrations and all COST employees received a gift from the Dean's office. Special thanks to the Holiday Celebration committee members for a job well done.



## New Technology Building

Spring has sprung and the grass is green, but when will construction on our new building be seen? This is a question that we in the College of Science and Technology are often asked and even wonder ourselves. So here is an update on the construction of the new science and technology building. In January of this year the chairs from all departments to be housed in the new building had the opportunity to meet with the building architect Mr. William J. Stanley, III from Stanley, Love-Stanley, P.C. During these meetings the final design touches were made to the plans.

More recently, President Rudley announced that Construction Bonds had been sold and funding for

the building would be on campus shortly. Construction is scheduled to begin early this summer (2011) and should last 18 months. The two-winged building with 4 stories has an eye-catching design and will be the new home for the Departments of Aviation Science and Technology, Computer Science, Engineering Technology, Industrial Technology, Physics, Transportation Studies and the Dean's Office.



## Mathematics Learning Center

The Department of Mathematics is determined to help students to succeed in their mathematics classes not only through the traditionally-practiced classroom instruction and office hours but also through an additional resource facility.

Beginning this spring semester of 2011, the Department of Mathematics opened a Mathematics Learning Center. The Learning Center is housed in 102D of the Science Center, which is equipped with whiteboards, tables, chairs, and 3 conference rooms for one-on-one tutorial sessions. The goal of the Learning Center is to furnish a supportive atmosphere for any student needing reinforcement of mathematical concepts and

problems in an informal and more relaxed setting. The facility is staffed by the mathematics faculty, and will be open each term starting on the Monday of the second week of classes through the last week of the classes. Hours of operation will be from 8 a.m. to 5 p.m. five days per week. The center will be open to all students registered for mathematics courses regardless of level.



# NEW DEPARTMENT CHAIRS

## AIRWAY SCIENCE MARK SHERMAN

Dr. Mark Sherman received his Doctorate of Applied Behavioral Studies with a concentration in Aviation and Space Management from Oklahoma State University in 2006. He also holds an Education Specialist degree, a Master of Arts in History, a Master of Science in Aviation Safety, and a Bachelor of Science in Aviation Technology from the University of Central Missouri.

Dr. Sherman currently serves as Chair and Associate Professor of Aviation Science

and Technology at Texas Southern University (TSU). Prior to joining TSU, Dr. Sherman was an Associate Dean of Aviation with Higher Colleges of Technology, Abu Dhabi, United Arab Emirates; Aviation Department Chair with Farmingdale State College, Farmingdale, NY; Interim/Assistant Department Chair with the University of Central Missouri; and Assistant Professor at Ohio University. He was also a Flight Operations Training Specialist

with Trans World Airlines and an Occupational Safety and Health Specialist with the US Air Force. In 2004, Sherman retired from the U.S. Naval Reserve as an Aviation Electrician Mate/P-3 Flight Engineer.

His FAA certificates include CFI, Certified Ground Instructor, Commercial Pilot, and Airframe and Power plant Mechanic. He also holds an FCC license as a General Radiotelephone Operator with a radar endorsement.



*Dr. Mark Sherman*

Dr. Sherman is a visiting team member for AABI, serving on the Technology-Based Education, Guidance Committee, and Awards Committees; is active in the University Aviation Association, NIFA, Alpha Eta Rho, the American Association of Airport Executives, and Boy Scouts of America.

## MATHEMATICS AZIME SERPIL SAYDAM

Dr. Azime Saydam, Associate Professor and Department Chair of Mathematics, began working at TSU in January 2011. She earned a Ph. D. in mathematics from the University of Nebraska at Lincoln. She has been Assistant Professor, tenured Associate Professor, Assistant Department Head, and Department Head of Mathematics and Physics at University of Louisiana at Monroe for 11 years. She has been an active scholar with numerous journal publications, presentations, honors and awards, and involvement in various committees and mathematics societies. Of course, the most rewarding part of her job is to see fresh and inquisitive minds. She tries her best pedagogically to inspire them to a practical and critical

comprehension and appreciation of some mathematical ideas through her fully-prepared lecture notes and clearly-presented lectures. She prepares students to become well-versed mathematically, which makes our society better and brighter through intelligent theoretical and practical works.

The accomplishments she has achieved at ULM, and is most proud of, include: (1) becoming the distinguished professor in 2006, (2) founding KME (Kappa Mu Epsilon) Mathematics Honor Society in 2001, (3) serving and later becoming the director of the ULM Honors program in 2004, (4) publishing in some major journals of mathematics, (5) becoming the most favorite professor of students, and (6)



*Dr. Azime Serpil Saydam*

being promoted to the department head of mathematics. In her free time she enjoys reading classical world literature, watching marvelous old movies, listening to music of almost every genre, eating delicious southern food, and meditating over the magic of the world and life while having a cup of hot coffee latte. If her students could leave her classroom knowing only one thing, it would be the beauty of thinking, especially mathematically.

### Summer Programs

Houston National Summer Transportation Program (HNSTI), 713-313-7925, Godazi\_kx@tsu.edu

Port Arthur Summer Transportation Program (PANSTI), 713-313-7925, Godazi\_kx@tsu.edu

Texas City Summer Transportation Program (TCNSTI), 713-313-7925, Godazi\_kx@tsu.edu

TSU UTGSBS Undergraduate Program in Prostate Cancer Research, 713-313-7912, shishodias@tsu.edu

Pre-College Engineering Summer Program, 713-313-7995, olowokeredo@tsu.edu

Space Engineering and Science Internship Program (SESIP), 713-313-4259, Mcdaniels\_va@tsu.edu

Summer Maritime Academy (SMA), 713-313-4394, williamsua@tsu.edu

## STAFF SPOTLIGHT CHARLOTTE WHALEY

Charlotte S. Whaley has been employed with Texas Southern University since March 1992 and has served in several office management positions. She currently serves as the College Business Administrator for the College of Science and Technology.

Ms. Whaley manages the administrative services in the Office of the Dean, and the daily operations of the College. She coordinates daily activities between the College and the Office of the Provost, and is also responsible for coordinating

activities between the Office of the Dean and all departments and research centers within the College. She has vast experience in the operations of the University, having worked under the leadership of several deans.



Ms. Charlotte Whaley

## STUDENT SPOTLIGHT CHELSE HOOVER

Technology has sparked an interest in me since I was a child. I grew up in Chicago's historical Morgan Park neighborhood where many of the homes were designed by the great Frank Lloyd Wright. I knew I wanted to go into either architecture or civil engineering, however, I didn't make the decision until I was looking to apply to colleges. I chose to study Civil Engineering Technology because this broad field can open many doors. In addition to encountering many opportunities, engineering requires an abundance of

knowledge in the STEM fields. I know that neither many women nor minorities gravitate towards the STEM fields, so I felt that it was important that I broke the mold to show my peers that succeeding in the technical field is not impossible.

Studying Civil Engineering Technology at Texas Southern University has been very good for me. Since being here I have had two internships. This past summer I worked in the Transportation Engineering department at KBR and the preceding summer I partook in the TSU Science

Engineering and Space Internship Program. (SESIP). With the support of TSU faculty and friends I have been able to maintain a GPA above 3.0 every semester I have attended the university. As I quickly approach my final semester as a Civil Engineering Technology undergrad I am overwhelmed with the many options that I have post-graduation. I am faced with the options of stepping into the working world, going on to pursue a graduate degree, and also preparing to obtain my Engineer in Training license.



Ms. Chelse Hoover

I am confident that I will do well in whichever endeavor I pursue because I have been educated by a phenomenal group of people and I know I can always reach out to my TSU family for support.

## ALUMNI RAVES J D RICE

Mr. JD Rice entered TSU in the fall of 2004 and graduated with a BS in Biology, Summa Cum Laude in May of 2008. Immediately after graduating Mr. Rice was offered a job as a Senior Research Technician with ExxonMobil Upstream Research Company with whom he has been employed ever since. When asked about his tenure at TSU Mr. Rice responded with the following: "My time at TSU taught me several things that

prepared me very well for my job working in several labs doing research. Even though my degree is in Biology I am able to utilize the laboratory training I received from Dr. DuMond while working in his research lab for three years. The lab techniques I learned from Dr. DuMond were extremely vital in preparing me for a career in working in labs. TSU also prepared me to work in a company with personnel from many nationalities.

Attending a University that included students and professors from many countries helped me gain a better understanding of individuals from outside of my own nationality. I am grateful for my time at TSU and the education I received. I feel that TSU prepared me very well for my career and for life in general."

Currently, Mr. Rice has been working on a project in the Field Testing of



Mr. J D Rice on the lower right

Electrofrac™ Process Elements at ExxonMobil's Colony Mine. We in the College of Science and Technology are very proud of Mr. Rice and contributions he is making to science.

# STUDENT ACCOMPLISHMENTS

The Intelligent Transportation Society (ITS) TSU student chapter held its monthly meeting on February 23, 2011 in Room 102, Education Building, TSU. About 30 graduate and undergraduate students from Department of Transportation Studies, Department of Engineering Technology, and Department of Computer Science in TSU College of Science and Technology attended this technical meeting. The organization advisors Drs. Fengxiang Qiao and Xuemin Chen attended, while Miss Meijun Liu, a graduate student from Department of Transportation Studies shared a series of advanced models and technologies utilized internationally on "Road Pricing," which attracted the academic interest of students from multidisciplinary programs.



*ITS monthly meeting (top), TRB annual meeting (bottom)*

During January 23-27, 2011, graduate students in the Department of Transportation Studies attended the 90th Transportation Research Board (TRB) Annual Meeting in Washington D.C. The TRB meeting is the largest and most influential transportation event each year in the world. This year, students in the Department of Transportation Studies submitted 10 research papers to the TRB meeting and 4 papers were presented and published in the TRB meeting. It is a good opportunity for our students to present the research accomplishments at TSU to the nation and the world.

*TSU students present research at the Capitol (top), NOBCChE science bowl winners (bottom)*



The Gulf Coast Chapter of the National Organization for the Professional Advancement of Black Chemist and Chemical Engineers (NOBCChE) and members of the Environmental Toxicology Graduate Student Association (ETGSA) partnered with the Department of Chemistry to host their Annual Science Quiz Bowl. On Saturday, February 26th, in the College of Science & Technology, several senior high schools competed for an opportunity to represent the Gulf Coast Chapter at the 38th Annual NOBCChE National Meeting which will be held April 19th -22nd in Houston, TX at the Hilton Americas Hotel. Pearland High School was the 1st place winner, Energized for Science, Technology, Engineering & Mathematics (ESTEM) Academy, Central Campus placed 2nd, and 3rd place winner was Lee High School.

Department of Transportation Studies student, Meijun Liu, won the \$5000 funding support from the Thurgood Marshall College Fund to do a research on short-term traffic flow prediction using bio-inspired computational intelligence. Meijun is a graduate student advised by Dr. Yi Qi in the Transportation Studies Department. Short-term traffic flow prediction is pivotal for proactive control in transportation management. Accurate prediction of traffic flow is the basis for various intelligent transportation system applications. The objective of this research is to develop a reliable prediction model for short-term traffic flow using bio-inspired computational intelligence.

Mr. Daniel Osakue and Mr. Osman Ahmed, students of the Computer Engineering Technology and Computer Science programs in the Department of Engineering Technology and Department of Computer Science respectively, presented their research on virtual and remote laboratory at Texas Undergraduate Research Day at the Capitol on February 14, 2011. The TSU team used NI LabVIEW to develop virtual and remote experiments for DC, Digital Signal Processing and Data Communication courses. Mr. Osakue and Mr. Ahmed are mentored by Dr. Xuemin Chen. Thanks to Provost Sunny Ohia and Interim Associate Provost Dr. Adebayo Oyekan for funding the trip. The students were escorted to Austin by Dr. Xuemin Chen and Mr. Shola Ewulo, Director, Research Funding & Pre-Award Services.

## Tri Beta Biological Honor Society

The National Biological Honor Society, Beta Beta Beta, Delta Upsilon chapter at TSU more commonly known as Tri-Beta is a student run and organized group that is dedicated to the understanding and appreciation of biological study and expanding the boundaries of human knowledge through scientific research. Currently Tri-Beta, Delta Upsilon chapter, is involved with community service, biology tutoring, and offering research opportunities to those that are interested. Tri-Beta offers a great opportunity to undergraduate students in that students will be exposed to scientific research and leadership opportunities within the organization.

In the past Tri-Beta has participated in AIDS walk and breast cancer awareness and fundraising for a cure. Additionally, the organization has visited local schools in order to promote biological science and college education in general. Tri-Beta participates in biology tutoring that is currently offered free to students of TSU. Tutoring hours currently being offered are Monday, Wednesday, and Friday from 12:00 – 5:00 p.m. and Tuesday from 2:00 – 4:00 p.m. in SB 217. The 2011 officers include Kristine Elliott as Sergeant at Arms, Nina Alaniz as Historian, Marian Fagbemi as Treasurer, Rachel Guthrie as Secretary, Olusegun Ogunniyi as Vice President, and Justin D. Shanks as President. The primary faculty advisor for Tri-Beta is Dr. Jason Rosenzweig with Dr. Shishir Shishodia also playing an advising role to the organization. Please support your local Biological Honor Society at their fundraising.

# SCHOLARLY AND CREATIVE ACTIVITIES

## Awards and Recognitions

Mrs. Paula Eakins was nominated among several other clerical/secretarial recipients from the Texas Southern University Staff and she was awarded to receive the Staff Meritorious Award for Clerical/Secretarial from the University Staff Council on December 10th, 2010. The criteria for this award was as follows: One whose performance of assigned tasks deserves recognition, a positive attitude that inspires fellow co-workers and the general public, dependability,



*Mrs. Paula Eakins receives Meritorious Award from President John Rudley*

responsibility, stability and exercise extraordinary courage. The COST is very proud to have her work in our area.

## Presentations

Chen, X., L. Yu, L. Zhu, Y. Zhang, and Z. Lin. Calibrating and Validating a Micro-simulation Model of Bus Rapid Transit Corridor with Heuristic Optimization Methods. Presented at 90th Transportation Research Board Annual Meeting, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Xu, Y., L. Yu, and G. Song. Modeling of Vehicle Specific Power and Instantaneous Speed Distribution for Expressways in Beijing. Presented at 90th Transportation Research Board Annual Meeting, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Yang, H. and L. Yu. A Comparative Overview of MOVES2010 and MOBILE6.2 for Smoothing the Model Conversion Process. Presented at 90th Transportation Research Board Annual Meeting, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Zhao, N. and L. Yu. Statistical Distribution of Capacities on Ring-Road Expressways of Beijing Based on Bound-Line Analysis. Presented at 90th Transportation Research Board Annual Meeting, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

## Grants

The Department of Engineering Technology has received funding to offer a pre-college summer engineering program. The program is being funded by the Army Research Office.

## Meetings and Workshops

Dr. Robert Ford (Chemistry/C-SEO) and Ms. Sarina Williams (Maritime Transportation Management and Security) represented TSU at the 25th Annual Momentum National Conference on Higher Education in Philadelphia, Feb 18-20, 2011.

## Publications

Lai, J., G. Song, and L. Yu. A Comparative Analysis of Three Approaches for Developing CO2 Emission Inventory: A Case Study for Beijing. Forthcoming. In Transportation Research Record: Journal of the Transportation Research Board of the National Academies, Washington, D.C., 2011.

Song, G and L. Yu. Characteristics of Low-Speed VSP Distributions on Urban Restricted Access Roadways in Beijing. Forthcoming. Transportation Research Record: Journal of the Transportation Research Board of the National Academies, Washington, D.C., 2011.

Tao, F., Q. Shi, and L. Yu. Evaluation of Effectiveness of Coordinated Signal Control on Reducing Vehicle Emissions during Peak Hours vs. Non-peak Hours. Forthcoming. Transportation Research Record: Journal of the Transportation Research Board of the National Academies, Washington, D.C., 2011.

T. Sandu, D. Vrinceanu, E. Gheorghiu Surface Plasmon Resonances of Clustered Nanoparticles, Plasmonics 6, 124 (2011).

## Thesis Advisement

Anita Lewis, "The Modulation Of Transcription Factors In Space Related Stress," March 23, 2011. (Advisor: Dr. Shishir Shishodia)

Ayo Jejelowo, "The Effects of High Energy Particles on Protein Expression in Mice Intestinal Tissue," March 2011. (Advisor: Dr. Shishir Shishodia)

Hairong Liu, "Impossible Constructions in Euclidean Geometry," completed Friday, February 18, 2011. (Advisor: Dr. Robert M. Nehs)

Latishsha Clark, "Analysis of Hazardous Material Incidents in the Gulf Coast Region: A Case Study of Houston, TX," M.S. Research Thesis, Completed in October 2010. (Advisor: Dr. Lei Yu)

Qinyi Nancy Shi, "Effect of Traffic Management Strategies on Emissions," M.S. Research Thesis, Completed in February 2011. (Advisor: Dr. Lei Yu)

Tiarra Spencer, "Molecular Phylogeny Of Aspergillus Species Based On The Internal Transcribed Spacer (ITS) Region." Completed March 25, 2011. (Advisor: Dr. Hector Miranda)

Xiao Robert Zhang, "Driving Schedules for Evaluation of Greenhouse Gas Emission for Light-Duty Vehicles," M.S. Research Thesis, Completed in August 2010. (Advisor: Dr. Lei Yu)