

Annual Report

2011-2012



College of Science and Technology

TEXAS SOUTHERN UNIVERSITY

COLLEGE OF SCIENCE AND TECHNOLOGY

ANNUAL REPORT 2011-2012

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Vision

The College of Science and Technology will become a leader among urban Universities in educating a diverse population in interdisciplinary sciences and contemporary technologies, preparing them for a competitive global economy.

Mission Statement

The College of Science and Technology at Texas Southern University is dedicated to integrating sciences and contemporary technologies, through education, scholarly activities, and community service; meeting the needs of a diverse graduate and undergraduate student population while addressing critical urban issues within a global economy.

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Strategic goals

Goal 1. Provide High Quality Instruction

- 1.1. Improve student performance in core education courses.
- 1.2. Promote and support innovative teaching and learning environment.
- 1.3. Secure and reaffirm accreditation and certification of all eligible programs.
- 1.4. Promote collaborative international education programs.

Goal 2. Perform Basic and Applied Research

- 2.1. Expand the scope of research and teaching, and thereby increase the amount of annual funding.
- 2.2. Increase the number of high quality scholarly and creative works generated by the faculty and by students.
- 2.3. Improve the incentive system for faculty teaching, research and service.
- 2.4. Promote interdisciplinary research.
- 2.5. Support entrepreneurship in research and technology transfer for commercialization.

Goal 3. Engage in Community Service

- 3.1. Develop and expand community outreach and public service programs.
- 3.2. Increase the number of continuing education units generated.
- 3.3. Promote involvement in and service to professional organizations.
- 3.4. Integrate service learning into the educational programs of the College.

Goal 4. Optimize Enrollment of Undergraduate and Graduate Students

- 4.1. Increase the number of college-ready incoming freshmen through outreach and recruitment.
- 4.2. Improve retention and increase 4-year graduation rates.
- 4.3. Increase graduate student enrollment.
- 4.4. Improve career placement outcomes
- 4.5. Increase the number of international students in the College.

Goal 5. Strive for Steady Increase in External Funding

- 5.1. Increase the funding from government, corporate and philanthropic organizations.
- 5.2. Increase alumni and friends giving.
- 5.3. Increase funds to support scholarships and endowments.

Goal 6. Ensure Efficient and Effective Administration

- 6.1. Provide adequate controls and ensure transparency in decision making
- 6.2. Allocate resources to support the College's mission
- 6.3. Enhance the College's aesthetics.
- 6.4. Integrate information technology into the management of the College.

Message from the Dean



Dr. Lei Yu, Dean, College of Science and Technology

The 2011-2012 academic year was stellar in terms of the achievements of the College of Science and Technology. The College was awarded one of the most prestigious National Science Foundation Grants from the Centers for Research Excellence in Science and Technology (CREST) program. The CREST award was for the establishment of a Center for Research on Complex Networks. Complexity is the watchword of the times and it can be found throughout nature and in all human activities. The five year 5 million dollar grant supports faculty and student researchers, education and community outreach, and technology transfer. A detailed story follows within this annual report.

The College is changing to a student-centered focus. The College seeks to improve student learning outcomes and their assessment. The completion of the University's Quality Enhancement Plan (QEP) provides the College with the leadership authority to develop significant changes in the programs it offers. Learning outcomes are being mapped in the curricula so that the objectives of the QEP will be achieved. We are changing higher education to reflect the interdisciplinary mastery required for

success in the information age. In our ten academic departments and seventeen specialized programs and centers of research, we are developing cooperative relationships between disciplines to prepare students with the critical thinking and analytical skills needed for success in the new world economy. These quality improvements will make our students more competitive.

True to our academic agenda, we now have graduates from the new Maritime Transportation Management and Security program, developed in partnership with the Port of Houston Authority. Students and faculty were honored for their accomplishments in our annual awards ceremony. We have a strong faith in the future of our students, which is exemplified by record contributions from our faculty and staff to the Faculty-Staff Annual Fund Campaign this year. The College received the "Top-Dollar" award from the university for the amount pledged for student scholarships.

This year we broke ground for a new building for the College. This is a significant new structure that will house the programs that were

displaced by hurricane Ike and new programs and research centers that have been established since that time. The College will occupy the western side of the campus, between Wheeler and Eagle Streets, and Ennis Street and the walking-bicycle trail.

We expect that the new academic year 2012-2013 will be as eventful as the past year with many more significant achievements. Our student-centered focus will refine student advising and direct student performance in achieving the desired outcomes in a timely manner. We are fully aware of many serious challenges, from continued financial constraints, recruitment and retention of well prepared students in STEM subjects, and sustainable funding for scholarships and assistantships for students. However, our programs reside in fields of great national need, which significantly impact both the national economy and national security. Hence, we will be more assiduous than ever before with an indomitable commitment towards improving our programs and providing the highest level of service to our students and the nation.

In the coming year we want to establish deeper relationships with our constituent communities that will foster a broader education for our students, use of services that we provide, and the implementation of real world applications of the research and development we engage in. Our intent is to be visibly active in communicating with and solving the problems of our communities. Thank you for your support.

PROFESSOR LEI YU, Dean
College of Science and Technology

COST Board of Advisors

Message from the Chairman

The 2011 – 2012 academic year for the COST Advisory Board was a successful one. The Board welcomed five new members: TSU Alumni John Etta, Port of Houston Authority; Dorothy Rasco, NASA; Giovanni Puccini, KBR; Kimberly Williams, JD, METRO; Sheila Blake, City of Houston. All of our new Board members bring fresh perspectives and capabilities to our efforts; by design. The COST Advisory Board has agreed to start the process to set up an Endowment that will award individual scholarships continuously over the long term.

The Advisory Board is working to assist in the College's efforts to build an Energy Center to facilitate the implementation of energy efficiency measures in the institutional, small commercial, and public sectors. We are also working with the Physics Department, preparing a significant, third presentation to Shell Oil Company focusing on research efforts to utilize nanotechnology for hydrogen storage solutions and advances in nano-catalysis for more efficient hydrogen production. More on-campus meetings with industrial

partners emphasizing COST facilities and students are expected. The 30 plus members of the Advisory Board represent over 1,000 years of academic and professional experience in the area of science and technology – that is a millennium. Our charge is to bring to the students of the college the strongest educational experience possible and prepare them to fully participate in what we all know will drive the economies of the world into the future – science and technology.

PAUL C. SIMMONS, PE
Chair, COST Board of Advisors



Ike Allen
Linbeck Group



Sheila Blake
City of Houston
Code Enforcement



John Etta
Port of Houston
Authority



Joseph Flowers
Schlumberger



Rudy Gomez
R. G. Miller
Engineers



Larry V. Green
City of Houston
Council Member



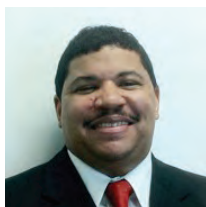
Chris A. Hudson
Morris Architects



Cernelious Jones
OMO Science, Energy,
and Technology



C. C. Lee
STOA International
Architects



Tracy Munoz
RealEC Technologies



Giovanni Puccini
KBR Infrastructure



Dorothy Rasco
NASA JSC



Paul Simmons
Paul Simmons &
Associates



Michael E. Smith
Marathon Oil
Company



Murdock Smith
Consultant



Kimberly J. Williams
Metropolitan Transit
Authority



Frazier K. Wilson
Shell Oil Corporation
Foundation

Infrastructure Development



COST Celebrates Ground Breaking for a New Science and Technology Building

The College of Science and Technology held an exciting ceremony on March 9, 2012 breaking ground for the construction of a state-of-the-art Technology building. The Chairman of the Board of Regents, Glen Lewis, several Regents of the University, the TSU President, John Rudley, and Provost Sunny Ohia were present along with other members of the administration, faculty, alumni, students, and friends. Dean Lei Yu led the activities.

Dean Yu believes that the University has shown a strong commitment to improving the facilities for science, technology, engineering, and mathematics at TSU. Dr. Yu stated,

"The completion of this building will make our programs truly competitive with state-of-the-art equipment and 21st century facilities. This building is the latest effort by TSU to make the College a more attractive place for study and research." The building will house state-of-the-art facilities for teaching and learning that will make the college very competitive as an outstanding school of science and technology.

The new Science and Technology building will also house the Advanced Research Centers for TranLIVE, Center for Research on Complex Networks, the Center for Transportation Training and Research, and the High Performance Computing Center.

The new building will be located on the corner of Wheeler and Ennis Streets, adjacent to the existing Science building and completes the Science and Technology Complex, which has been planned for many years.

The College lost a building at this site because it was irreparably damaged by hurricane Ike. The new building will have 110,000 square feet of space on four floors. The building will house the Departments of Aviation Science and Technology, Computer Science, Engineering Technology, Industrial Technology, Physics, and Transportation Studies.



Year in Review

National Science Foundation Funds "Center for Research on Complex Networks"

The National Science Foundation (NSF) announced an award of \$5 million over five years to Texas Southern University to support its proposed "Center for Research on Complex Networks (CRCN)," a new NSF Center of Research Excellence in Science and Technology (CREST). The new Center's multi-disciplinary team, led by Drs. Wei Wayne Li (PI), Lei Yu (Co-PI) and C. J. Tymczak (Co-PI), as well as Drs. Oscar Criner (Director of Education) and David Olowokere (Director of Technology Transfer), comprises a total of 14 world-class faculty scholars representing 6 different departments in the College of Science and Technology, including Computer Science, Transportation Studies, Physics, Engineering Technology, Mathematics, and Chemistry. The Center will support 25 undergraduate and graduate students each year over the next five years, providing them the opportunity to work with faculty on cutting-edge research.

The mission of this NSF Center is to conduct innovative and multidisciplinary research in the area of complex networks, which

will provide a knowledge base for the understanding of complex networks, i.e. energy efficient wireless sensor networks, urban transportation environmental networks, and distributed computational networks, allowing for the development and implementation of policies for global environmental sustainability. The Center will promote and implement diversity in STEM disciplines, through educational outreach initiatives and extensive efforts to recruit, retain and train members of underrepresented minority groups for leadership positions in the fast-changing global, scientific, engineering, and government sectors.

The CRCN researchers and students met weekly to present their research results to the global research community to suggest ways of working together in the future. The monthly CRCN Research Seminar was attended by CRCN investigators, students and interested individuals from TSU and other Universities.

Several speakers have made



research presentations that made a great positive impact on the Center Investigators and Center Students. They include Prof. D. J. Klein (TAMU, Galveston) on substitution-reaction posets; Prof. Lijun Qian (Prairie View A&M) on achieving robust end-to-end QoS in MANET; Prof. Martin Malandro (Sam Houston State Univ) on maximal subgroups of sandpile monoids.

The first Internal Advisory Board Meeting of the NSF CRCN was held on March 25, 2012 by the Chairman, Provost Ohia. During this meeting, the Center's PI, Co-PIs and the Directors of Education and Technology Transfer presented their progress to the board.

NSF Program Director, Dr. Richard Smith, visited TSU on April 2, 2012 and provided his valuable comments to the Center researchers after reviewing the infrastructure development and research progress of the center.



COST Fall Open House: Dr. Naomi Ledé Returns to Rousing Welcome

The College of Science and Technology welcomed a distinguished former faculty member at its 2011 Open House - Alumni and Partnership Luncheon. Dr. Naomi Ledé gave the keynote address, but not before a standing ovation was given her by all present. She is a distinguished professor emeritus and founder of transportation thrust of programs in the College.

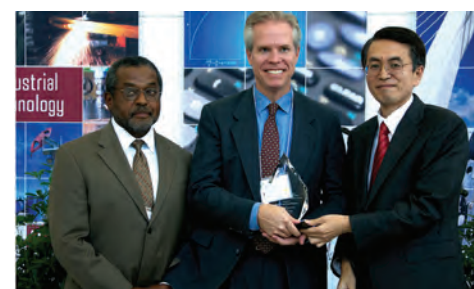
Dean Lei Yu gave a summary of the State of the College including highlights of the past year. He noted particularly the award to the College from the National Science Foundation of a \$5 million dollar grant from the Centers for Research Excellence in Science and Technology program.

Student presentations were given by John Metyko, a physics student, who spoke about radiation control in a medical setting. He is in the health physics program. Ceyhun Mestanzade, a

student in computer science, discussed high performance computing and data mining, and lastly, Justin Shanks, a biology student, discussed research on the effects of microgravity on bacteria.

Mr. Paul Simmons, the new Chair of the Board of Advisors, gave the perspective from the COST Board of Advisors. Mr. Simmons stated, "Our charge is to bring to the students of the College the strongest educational experience possible and prepare them to fully participate in what we all know will drive the economies of the world into the future - science and technology."

The "COST Partner of the Year Award" was presented to Mr. Joseph Flowers by Mr. Simmons assisted by Dean Yu.



Year in Review

Research on Freeway Auxiliary Problems

Researchers in the Transportation Studies Department at TSU are investigating Freeway Auxiliary Problems for the Texas Department of Transportation (TxDOT). TxDOT recently awarded a 2-year research project to TSU, for the Design and Scope of Impact of Auxiliary Lanes on Texas Freeways. Researchers at TSU, led by Dr. Yi Qi and Dr. Lei Yu, will develop guidelines and recommend best practices for freeway auxiliary lanes to reduce conflicts, improve safety, and reduce delays for the weaving area near the entrance and exit of freeways. Dr. Qi and Dr. Yu are nationwide experts in this field and have extensive experience in

geometric design and traffic operations. The Mini TranStar lab at TSU will be used extensively for data collection in this project. This lab allows the TSU team to pursue some research activities that could not be achieved in the past. Real-time traffic videos of local freeways will be extracted from this lab.

It is anticipated that the successful completion of this project will help to decrease crash rates, reduce traffic delays, and improve traffic progress on Houston freeways. The research team at TSU will contribute toward providing a safe, convenient, and efficient driving environment to Houstonians.

Maritime Students Honor Valero Executive and Former Olympian

Students in Professor Maria Burns' MTMS 322: Port and Terminal Operation Management class paid tribute to "Living Legend, Fred Newhouse" at a program in the COST on November 14, 2011. Newhouse, currently the Director of Public Affairs for Valero Energy in Houston, is a former Olympian with a gold medal in the 4x400m relay and a silver medal in the 400m, both in the 1976 Montreal Olympics. Passing a gold baton to each other during the event, students presented a tribute to

Newhouse that included information about the parallels between the success of an athlete and the success of a business executive. The event was attended by TSU students, members of the TSU Athletics Department, and TSU's first female Olympian, Judy Dyer.

Newhouse, an Alumnus of Prairie View A&M University, holds a B.S. in Electrical Engineering and a Masters degree in International Business.



STEP Program

Texas Southern University has implemented a comprehensive plan, the Science and Technology Enhancement Program (STEP), to enhance the science and technology undergraduate program at the university. The primary objective of STEP is to increase the number of African Americans and female graduates in biology and engineering technology. The program has achieved this overall objective through three programmatic guiding principles: (1) student recruitment and retention for academic success, (2) faculty development in teaching and scholarly achievements, and (3) curricular reform and enrichment through the use of information technology. The STEP Program is an academic excellence program designed for outstanding high school students, who are interested in pursuing degrees in STEM fields.



Sam Houston Boat Tour

Forty TSU Maritime students enjoyed a ride on the Port of Houston's M/V Sam Houston recently. On the trip around the 52-mile Houston Ship Channel, the students networked with members of the TSU Maritime Industry Advisory Board (MIAB), who represent the Port of Houston Authority, U.S. Coast Guard, U.S. Customs and Border Protection, and other agencies in the maritime industry.



COST Student Town Hall Meeting

The COST Dean's Student Advisory Council is comprised of thirteen students representing the ten departments of the College of Science and Technology and other student organizations in the College. The students play an important role as a direct communication line between the students they represent and the College's administration. The Council is encouraged to take the initiative to talk with students about issues and bring suggestions to improve the College. Dr. Yu has emphasized that the value of a student's COST degree increases as the College improves. The committee is co-chaired by Rachel Guthrie, Biology, and Dr. Desirée Jackson, Interim Assistant Dean. Other Council Members are Narada Walker (Computer Science), Alfonso Arteaga (Maritime), Adedeji Adeniyi (Engineering Technology), Terrell Gibson, (Environmental Toxicology), Vernaldo Wright

(Transportation Studies), Aqeeb Sabree (Mathematics), Jermaine Potts (Industrial Technology), Landra Williams (Physics), Olusegun Ogunniyi (Biology), Chi-Tam Nguyen (HOSA), Melody Roberson (Chemistry), and Edgar Moreno (Aviation Science). These students successfully hosted the second COST Student Town Hall Meeting on April 16, 2012 after a series of planning meetings. All COST students were invited to attend along with COST Administrators. Ms. Landra Williams served as Moderator for the question and answer period during which students asked questions of each administrator related to their concerns. Students also voiced their appreciation for the good things happening in the COST. The Dean's Student Advisory Council also conducted a brief survey related to student retention in the College the results of which will be reported to the COST departments.



NTCSOE-P Annual Advisory Board Meeting

The National Transportation Security Center of Excellence – Petrochemicals (NTCSOE-P) sponsored its Annual Advisory Board meeting along with a roundtable discussion by Emergency Professionals on March 2, 2012.



The day culminated with NTSCOE-P welcoming Congresswoman Sheila Jackson Lee to the official unveiling and demonstration of the Petrochemical Incident Location System (PILS) led by CTRR Researcher, Latisha Clark. Congresswoman Jackson Lee, a signer along with Houston area Congressman Al Green, on the 2007 legislation establishing the National Transportation Security Center of Excellence, was instrumental in establishing the criteria naming the 7 universities that are members of the NTSCOE.



Year in Review

Homecoming 2011

On October 22, 2011, the COST entered the TSU homecoming parade with a fabulous float representing the 2011 homecoming theme "The Ultimate Experience" which was Science, Technology, Engineering and Mathematics for COST. Each of these areas were represented on the float. All of the objects were very appealing but the bubbles from the science tubes along with the sound really surprised the crowd as the float passed by.

There were several COST students from various departments such as: our adorable queen, Ms. Shamail Allen and king, Mr. Jonathan Jolivet both from Biology, the Mathematics Queen, Ms. Olivia



Turner, Mr. James Leslie from Computer Science, Ms. LaShanna Simmons and Mr. Sunday Agboke both from Engineering Technology. Also on the float was mini COST Queen, seven year old, Ms. Egypt Cardenas Douglas.



COST was Awarded First Prize for Best Decorated Tent at the TSU Founder's Day Celebration 2011





COST Holiday Celebration 2011: International Cultures in Harmony

"International Cultures in Harmony" was the most appropriate theme for the 2011 Annual COST Holiday Celebration. The faculty, staff, and students in the College of Science and Technology represent a conglomerate of rich heritage and cultures and this year's annual COST Holiday Celebration highlighted that diversity. The COST Holiday Celebration was held December 9, 2011 in the atrium of the TSU Science Center. This year, the students celebrated together with the faculty and staff. Student representatives from the numerous COST Student Organizations held leading roles in planning and helping to make the event a huge success. Alfonso Arteaga and Rachel Guthrie assisted Dr. Robert Ford and Ms. Dolly Spencer, planning committee Co-Chairs, as Master and Mistress

of Ceremonies for the celebration. Nicholas Moore spearheaded the distribution of door prizes provided by the COST Department Chairpersons, Dr. Alamelu Sundaresan, the Hispanic Student Organization, and Beta Beta Beta Biological Honor Society.



Guests, some dressed in native cultural attire, received greetings from COST Dean, Dr. Lei Yu, COST Board of Advisors Chairperson, Paul Simmons, Mr. COST, Jonathan Jolivet, Miss COST, Shamail Allen, and Miss TSU, Shartajeye Wright. The audience was entertained by the talent of vocal soloists Latoia Brim, Thomas Johnson, and Adriene Tate. There were performances by Latin Dance Club, Dr. Carlos Handy (R and H duet), Dr. Lei Yu (magic tricks), Dr. James DuMond (jokes), Narada Walker

(saxophone solo), and the TSU Dance Company Revelers later danced to music provided by DJ Christopher Edmond.

The main attraction of the beautifully decorated atrium was an 8 foot Christmas tree adorned with ornaments, flags, and handicrafts representing the many national and international cultures that mix and mingle everyday in the College.

Miss TSU observed in her greeting that "there are more things that unite us than divide us, especially during this joyous time of celebration." How true. Again, the COST provided the perfect venue for its diverse faculty, staff, students, and guests to sit back, relax, eat hearty, dance, and have great fun with each other.



Year in Review



Chairs and the Dean's Office staff, to the students who he assured will help make the students' freshman year a smooth transition with educational success. Dr. Jackson recognized members of three student organizations: COST Dean's Student Advisory Council, COST Ambassadors, and Beta Beta Beta Biological Society, who were in attendance. Dr. Jackson acknowledged and thanked them for their volunteer assistance.

COST Freshman Reception

Dean Yu's vision of a reception for freshman COST majors and first time transfer students became a reality Friday, August 26, in the atrium of the science building under the coordination of Dr. Desirée Jackson, Interim Assistant Dean. All freshman COST majors received a t-shirt that states, "COST Majors Have Class." The "COST Freshman Reception" afforded the students, faculty and staff a chance to enjoy

a scrumptious lunch, and the opportunity to mix and mingle before beginning the rigorous academic year of class lectures, assignments, and exams. Students were also given the opportunity to visit booths set up in the atrium for each COST department providing information and souvenirs.

Dr. Yu introduced the COST faculty and staff including Department



The first "COST Freshman Reception" was enjoyed by all and was hailed as, "Something that must continue!"

COST Open House Appreciation Luncheon

Several COST faculty, staff, students, and alumni were treated with a luncheon, hosted by Dean Lei Yu, for their hard work and dedicated efforts to make the 2011 TSU homecoming experience a memorable one.

The College was well represented in each of the 2011 "TSU, The Ultimate Experience" homecoming events. In the office and lobby decoration competition, the Dean's Office won Third Place in the office category and the Chemistry Department won Second Place in the lobby competition. In the parade, COST was well represented with a beautiful

float adorned with Mr. and Ms. COST. The COST alumni won Second Place in the decorated car category. Lastly, the COST partnered with the School of Law for a fun-filled tailgating experience. Everyone had a fantastic time socializing, eating, playing games, and

listening to the sounds of old-school and new, line dancing and zydeco played by DJ Chris Edmund. The food was delicious, the ambience was warm and inviting, and the host was most gracious. Thanks to Dr. Yu, it was another beautiful day in the land of COST.





COST Shines at the 2012 Texas Southern University Research Week Program



The 2012 Texas Southern University Research Week program was a rousing success complete with a record number of poster presentations and faculty oral presentations. Dr. Jason A. Rosenzweig, Assistant Professor in the Department of Biology, was invited by the Office of Research to deliver the opening research seminar for the research week program describing his novel experiments characterizing bacterial virulence in a space-like environment.

Dr. Maruthi Sridhar Balaji Bhaskar, Assistant Professor of Environmental Science and Technology, was awarded 3rd place for Best Faculty Oral Presentation. Dr. Hyun-Min Hwang, Assistant Professor of Environmental Science and Technology, won 2nd place for his poster presentation. Additionally, Dr. Yuhong Zhang, Assistant Professor of Engineering Technology, won 3rd place for her poster. In addition to the faculty, the pride of COST, our students,

also represented our college very well and received 2 awards. Christina Randall, Undergraduate Biology major, won 1st place for Student Oral Presentations and Shantell Phillips, Undergraduate Biology major mentored by Dr. Renard Thomas, won 2nd place for Student Oral Presentations. Latisha Clark, Research Staff in Transportation Studies National Transportation Security Center of Excellence-Petrochemicals, won 2nd place for Staff Oral Presentations, and Jinhui Wang, Research Assistant Staff in Transportation Studies mentored by Dr. Qiao Fenxiang and Dr. Lei Yu, won 1st place in Staff Poster Presentations. Fei Tao, Graduate Research Assistant in Transportation Planning and Management mentored by Dr. Lei Yu, won 3rd place in Staff Poster Presentations.

On April 4, 2012, the College of Science and Technology hosted their college specific research program entitled, "Advancing

Together Through Cutting Edge Interdisciplinary Research and How That Impacts Research Capabilities and Teaching in the COST."

Attendees, including over 100 undergraduate COST students, were treated to two keynote presentations delivered by Dr. Bobby Wilson (Professor of Chemistry) and Dr. Demetrios Kazakos (Professor of Mathematics). The keynote addresses were followed by a stimulating panel discussion in which Dr. Lei Yu (Dean of COST and Professor of Transportation), Dr. Lila Ghemri (Associate Professor of Computer Science) and Dr. Shishir Shishodia (Associate Professor of Biology) joined Dr. Wilson.



Year in Review

COST Administrative Council Retreat

The COST Administrative Council held its annual retreat at South Shore Harbour Resort and Conference Center in League City, Texas on May 31-June 1, 2012. The administrative council addressed several issues of importance to the College among which were the policies and procedures of the Texas Higher Education Coordinating Board (THECB) regarding the establishment of new academic programs. Several of the new programs being considered by the College require compliance with the THECB. Dr. Mitchell Meuhsam, Dean of the College of Business Administration and former Dean of the Graduate School of Sam

Houston State University, was the featured facilitator for the discussion of the THECB policies. Administrative Council members had a lively discussion of their plans for new programs as the department chairs presented new program plans. Issues of student advisement surfaced as a major issue and were pursued further during the Faculty retreat.

The Administrative Council also considered issues relating to conflict resolution. Dr. Bryan Weatherford, a teaching and learning specialist for the Texas State Teachers Association (TSTA) presented and facilitated the discussion of faculty-student conflicts. Dr. Robert Ford,



TSU Professor of Chemistry and Faculty in Residence in the Urban Academic Village, presented a view of the conflicts in a close student-faculty living academic setting. Dr. Shayna Lee, Director of the TSU Student Health Center and a psychiatrist, led the discussion of student-student and other forms of conflict.

COST Faculty Retreat

The COST Faculty Retreat was held on August 10, 2012 at the Crowne Plaza Hotel near Reliant Park. A large segment of the faculty was present and enjoyed a full day program of active discussion on critical issues. The morning session was devoted to academic advising. Dr. Barbara Smith, Executive Director of Advising at the University of Texas at San Antonio, was a featured presenter. She discussed the advisement function operating at UTSA in detail and also the new legislation and THECB regulations that establish requirements for student advising. Ms. Stephanie Ross and Ms. Kenya Edwards presented a workshop on Advisement Practices.

Mr. Luis Villarreal, TSU resident representative for Illucian, invited Mr. Chuck Spotts, General

Manager and Dr. Tim Coley, member of the professional staff of Illucian, the provider of Information technology services for Colleges and Universities. Dr. Coley made a presentation on the benefits of Illucian's advisement software product and how it assists faculty and students in their advisement processes.

The afternoon session was devoted to "Best Practices in Rank, Tenure, and Promotion (RTP) Practices" with featured presenter, Dr. Bryan Cole, Professor Emeritus, Department of Higher Education Administration and Human Resources Development, Texas A&M University, College Station. Dr. Cole's presentation brought to the faculty the issues to be taken into consideration when developing guidelines for faculty evaluation. His workshop elicited the

major concerns of the faculty present with respect to faculty RTP policy at TSU. This was major feedback to the College committee. Dr. Marian Hillar, Chairman of the College RTP committee presented the current state of the committee's deliberations.

The retreat ended with door prizes and a drawing for the grand prizes of three iPads for lucky faculty members.



Conference on Roundabout Planning, Design, and Operation at TSU

The Department of Transportation Studies at TSU, partnering with Traffic Engineers, Inc., successfully hosted a conference on roundabout planning, design and operation held at TSU on March 1, 2012. Over 100 attendees from federal and state transportation organizations, local transportation industries, students, and faculty members attended the conference. Dr. Yu, Dean of COST, and Ms. Rachel Carleton, Chairman of Traffic Engineers, Inc., gave opening remarks at this

conference. Dr. Qi, the interim Chair of the Transportation Studies Department presided over the conference. Three international and local experts were invited to give presentations on the planning, design, and operation of the roundabout, an innovative intersection design alternative to the traditional signalized intersection. This conference provided a forum for the exchange of technical and administrative information concerning different aspects of roundabouts.



US Coast Guard Officials Visit to the New Maritime Certification Program

U.S. Coast Guard Commander Mark Bottiglieri, accompanied by Training Officer Mark Simpson, met with the Dean of the College of Science and Technology, as well as Faculty, Staff, and Students of the Maritime Program in the Science Building on February 1, 2012.

The purpose of the visit was to preview the newly proposed Maritime Certification Program in the Department of Transportation Studies. The event opened with Dean Lei Yu, commenting on the excellent performance attributed to the Transportation Studies Department at TSU since its inception and the impressive progress of the Maritime Program since its founding in 2010. Dr. Yi Qi, interim Chair of the Transportation Studies Department briefed the U.S. Coast Guard Officers regarding development of the proposed Maritime

Certification Program at TSU and discussed opportunities for mutual benefit within TSU's existing partnership with the USCG.

The USCG Officers attended an exciting presentation of the proposed Maritime Certification Program, developed by Prof. Maria Burns of the Maritime Transportation Management and Security program. The visit strengthened the existing partnership between the USCG and TSU, and will contribute to improving maritime industry standards.



COST By-Laws Approved at Opening Faculty Meeting

The Faculty in the College of Science and Technology approved the College By-Laws and Standing Committee Rosters at a marathon Spring 2012 Opening Faculty Meeting. Forty-eight faculty members participated in the secret ballot voting. The voting process was preceded by a detailed discussion on the issues. The voting process was moderated by the COST Faculty Senators Profs. Ford, Javadian and Ghemri. They will be remembered as the first group of COST Faculty Senators who moderated the College voting and College business in a smooth, constructive, and productive manner. Prof. Oscar Criner chaired the By-Laws committee and will continue to work to address the issues.

Year in Review

Visit by Mr. Mario C. Diaz of the Houston Airport System

Mr. Mario C. Diaz, Director of the Houston Airport System, City of Houston, paid a visit to Texas Southern University and its College of Science and Technology on January 18, 2012. Mr. Diaz was accompanied by Ms. Rhonda C. Arnold, the Director of Community Relations, External Affairs Division, Houston Airport System. Mr. Diaz and Ms. Arnold met with Dr. Lei Yu, Dean

of the College of Science and Technology, Dr. Mark Sherman, Chair of the Department of Aviation Science and Technology, and Mr. LaRence B. Snowden, Director of Programs, Barbara Jordan-Mickey Leland School of Public Affairs. In the meeting, Mr. Diaz discussed his vision and plan in regards to establishing technical workforce pipelines for the aviation and aerospace



industries in the Houston area. Discussions also included various student scholarship, internship, employment, and academic collaborative opportunities between the Houston Airport System and TSU.

Building Pipelines in STEM: NASA URC CBER Symposium

The building Pipelines in STEM for our Youth Symposium was organized by the NASA Center for Bionanotechnology and Environmental Research (CBER) on January 14 at the TSU Science Center.

The morning program began with the introduction of K-12 students to the NASA CBER scholars and fellows. After lunch, the K-6 students engaged in hands-on science activities and the 7-12 grade students got an opportunity to speak with mentors from various STEM disciplines and participate in science activities.

The participants engaged in the discussion about the challenges in pursuing STEM education. The major thesis of the symposium was "why are minorities not pursuing undergraduate and post graduate STEM educational opportunities in large numbers and whether or not this is linked to the student's preparatory education." The opening remarks were made

by Professor Adebayo Oyekan, Interim Director of the NASA URC CBER. Congresswoman Sheila Jackson Lee greeted the young participants and shared her words of motivation and encouragement with them. A very engaging presentation on Science, Technology, Engineering and Mathematics (STEM) was made by Mr. David Jackson, Principal of Lucile Gregg Elementary School. The symposium culminated with a presentation by Queen Quet, Chieftain of the Gullah/Geechee Nation.

Three roundtable discussions were held: Challenges to Students Learning in STEM; Creating a Launch Pad for Success: How to Catapult into the Field of STEM; and A Solid Return on Investment: Investing in STEM programs for K12. The roundtable discussions were aimed at addressing the problem, K-12 peer-to-peer discussion, and constructing solutions. Students at all levels of education greatly benefitted from the program. The program ended at 5:00 PM with a closing remark by Professor Oyekan.



Mentoring Program by Houston Medical Forum

Houston Medical Forum was hosted by the TSU Department of Biology Pre-health Professional Club. The event took place on April 19, 2012. The partnership will facilitate mentorship of our students by specialists in various areas, exposing the students to patient/clinical settings and helping them to realize their full potential and career goals. The event was facilitated by Dr. Warren Williams, Interim Chair, Department of Biology and Dr.

Ayodotun Sodipe, Assistant Professor of Biology.

The event was attended by Randall Wright, MD, Conroe Regional Medical Center, Latanya Jones Love, MD, UT Health Science Center at Houston, H. Philip Pierpont, DDS, UT Health Sciences Center Dental Branch at Houston, William Hadnott III, MD, Park Plaza Medical Center, Cedric Smith, MD, Real Time Medicine, Charlotte M. Akor, MD, Pediatric



Ophthalmology, Tammara Watts, MD, Ph.D, UTMB Health, and James L. Phillips, MD, Baylor College of Medicine.

Test Drive Your Future

Dr. Jarris L. Taylor, Jr., this year's featured speaker for the Test Drive Your Future (TDYF) seminar, along with Cause 360 Entertainment Group, and Urban Media Solutions (UMS) visited TSU on April 26, 2012, to speak to students in the STEM programs.

Dr. Jarris Taylor serves as Deputy Assistant Secretary of the Air Force for Strategic Diversity Integration. Spearheading the Obama administration's diversity efforts inside the US Air Force, Dr.

Taylor is helping to make a major push for greater diversity in its officer's rank and its expanding civilian job corps in STEM fields. Dr. Taylor provides leadership, strategic direction, and oversight to all levels of the Air Force to ensure a diverse and inclusive Total Force. TDYF aids the Air Force in that goal.

TDYF was developed as a cause-related initiative to engage and celebrate students who exhibit a strong commitment to academic



achievement and leadership. Specifically, TDYF promotes interest in career fields that are heavily underrepresented by minorities, while also promoting and providing assistance for these students and the universities they attend.

COST Received Funding as Part of UTC Program

Under the leadership of Dr. Lei Yu, Dean and Professor of Transportation Studies, COST received new funding as part of the new Tier One National University Transportation Center (UTC) Award announced by U.S. Transportation Secretary LaHood. This new UTC, named TranLIVE (Transportation for Livability by Integrating Vehicles and Environment), is a five-institutional

consortium, which is led by University of Idaho and also includes Old Dominion University, Syracuse University, Texas Southern University, and Virginia Polytechnic and State University. The five institutions will share 3.5 million dollars of annual funding.

The Center for Transportation Training and Research (CTTR) received continued funding as part

of the Southwest Region University Transportation Center (SWUTC), which successfully re-competed in the new funding cycle. The restructured SWUTC is led by Texas A&M University and includes UT Austin, TSU, the University of New Orleans and Louisiana State University. CTTR was founded by Dr. Naomi W. Lede and is presently directed by Dr. Carol Lewis.

Awards and Recognitions



2012 Texas Southern University Faculty Excellence Awards

This academic year will be remembered by the College family as it swept the 2012 TSU Faculty Excellence Awards.

On April 11, 2012, President John Rudley presented 4 out of 5 university Faculty Excellence Awards to the faculty members of the COST, showing thanks for the hard work of the faculty of the College. Dr. Xuemin Chen from the Department of Engineering Technology was presented with the Faculty Award of Excellence for Mentoring, Undergraduate Research, and Creative Activities. Dr. Chen's passion for excellence and unwavering will for success did not go unnoticed, and his hard work and dedication in

mentoring undergraduate research paid off.

This year's Scholarly Research/Creative Activities Award was given to Dr. Wei Wayne Li, from the Computer Science Department. As the PI of the Center of Research Excellence in Science and Technology (CREST) newly awarded by the NSF in the amount of \$5 million over five years, Dr Li is unmistakably deserving of this award and recognition.

The Provost's Department of the Year Award was presented to the Department of Transportation Studies, headed by Dr. Yi Qi. The award is much deserved by the

hardworking and productive faculty, the exemplary students and for the department's brilliant achievements over the years.

"Such a great honor to be the recipient of a presidential award." These were the words of this year's Presidential Achievement Medal, Dr. Bobby L. Wilson, from the Chemistry department. His undisputed accomplishments, service and dedication within academia emanates high standards grand enough to be seen and recognized as extraordinary by the President himself. Such an achievement is an inspiration for all to reach for the stars.

COST Administrative Professionals Staff Appreciation Luncheon

The COST honored its administrative staff for their exemplary contributions and service to the College at a luncheon held Wednesday, April 25, 2012 in recognition of Administrative Professionals Day. The staff has worked tirelessly to



accomplish the objectives and mission of the College. In addition, COST staff continue to represent the College with the highest standards and dedication to students. We salute and appreciate our staff for a job well done ... keep shining with success!

Awards and Recognitions



College of Science and Technology Awards Celebration

The annual College Awards Ceremony was held Thursday May 3, 2012. Many awards for scholarship and service achieved over the academic year were celebrated. The College year-end celebration attracted a full house to the festivities. President John Rudley interrupted his busy schedule to enjoy a moment with students, faculty, and staff. Students who achieved high academic averages, especially those who maintained a perfect 4 point average over the past two semesters, were recognized for their achievement of excellence. The Dean's Student Advisory Council and the COST Student Ambassadors were recognized for their service to the College.

The audience was entertained by the Dance Company, Chop

Drummers, the Latin Dancers, and the Argentine Tango dancers. The Joseph Flowers Scholarships were Awarded to five students, Graduate Research Enrichment Scholarships were awarded to ten students, and Undergraduate Research Enrichment Scholarships were awarded to three students. The COST Faculty and Staff Scholarships were awarded to twenty-five students. Each year the faculty and staff pledge gifts to the University Faculty and Staff Annual Fund Campaign to support the university. The COST faculty specified that their contributions go to support COST students. This strong support is indicative of the commitment that the faculty and staff of the College has to its students.

COST Faculty Excellence Awards

were presented to Dr. Willie Taylor for Distinguished Teacher of the Year, Dr. Bobby Wilson for Distinguished Undergraduate Advisor of the year, Dr. Fengxiang Qiao for Distinguished Researcher of the Year, and Ms. Ursula Williams for Distinguished Staff of the Year. Dr. Shishir Shishodia was awarded the 2012 Distinguished Service Award, and Dr. Daniel Vrinceanu and Dr. Jason Rosenzweig received the Dean's Leadership Award for outstanding contributions to the College. Mr. Alfonso Arteaga was named the Distinguished Undergraduate Student of the Year and Ms. Jing Fang was named the Distinguished Graduate Student of the Year. Mr. Arteaga also received the Dean's Student Leadership Award for his service contributions

TSU Distinguished Alumni Awards

Texas Southern University presented accomplished alumni with its highest honor-the Distinguished Alumni Award. As part of Homecoming Week (October 16-22, 2011), the event was sponsored by the Office of

Alumni Relations at the University. The Annual Distinguished Alumni Awards event recognizes excellence among former students of TSU. The campus community, alumni, students and the general public were invited to attend. Dr.

Albert Nelson Thompson, an alumnus of the College of Science and Technology was awarded one of the the 2011 TSU Distinguished Alumni Award.

Awards and Recognitions

HAMP Group Scholarships

The HAMP group consists of four professors in the Mathematics department. They are Joan Evans, Roderick Holmes, Robert Nehs and Willie Taylor. Professor Taylor created this group believing that High Achievement in Mathematics is Possible and hoping to raise awareness about college teaching as a career for underrepresented

minority students. Certificates of excellence were given to 5 students. The students were Ariel Bowman, Jose Cabrera, Jazmine Irving, Ruqiah Muhammad, and Aqeeb Sabree. Additionally, graduate student Jessica Poole received a HAMP Scholarship in the amount of \$1000.00 as well as a certificate of excellence.



Taylor Family Awards Scholarships

Three Mathematics majors, Ariel Bowman, Jose Cabrera, and Jazmine Irving were awarded the Adrienne Elaine Taylor Memorial Scholarship on May 3, 2012. Each student received \$500.00 to use toward their educational endeavors. Professor Willie Taylor and wife, Gwendolyn L. Taylor, made the donation for the

awards. Professor Taylor's daughter, Adrienne, was a Mathematics major at Texas Southern University when she passed away in January, 1997. The students receiving the awards impressed Professor Taylor with their willingness to share their knowledge of Mathematics with others.

Maritime Students Celebrating Excellence in Achievement

The 85th Honors Day Convocation took place on Thursday, April 5, 2012 and the Maritime students of the Transportation Department had multiple reasons to celebrate, as their efforts were recognized for great accomplishments.

Maintaining top grades in every semester is not an easy task, yet it is gratifying to know that the Maritime students are not just doing the minimum, but are performing far and beyond. Some students have managed to maintain up to a perfect score of a 4.0 GPA for more than one semester in a row, whereas others have maintained the 4.0 GPA for the entire time they have been at TSU. The TSU Maritime Transportation Management and

Security Program was first launched in Fall 2010. In less than two years, the first generation of its senior students will be graduating in May and December 2012. With all these firsts, no wonder Dr. Qi and the Transportation Department obtained the prestigious "Department of the Year" Award!



COMTO Scholarships

Two Transportation Studies graduate students, Haixia Liu and Peggy Adolph, received scholarships from the Conference of Minority Transportation Officials (COMTO) at an April 26, 2012 event. Haixia received the Shirley A. Delibero Leadership award of \$2500.00 and Peggy received the College Scholarship of \$1000.

Haixia has been involved in Texas Department of Transportation research project developing Guidelines for Operationally Effective Raised Medians and the Use of Alternative Movements on Urban Roadways. Peggy currently conducts research in the Center for Transportation Training and Research. She is involved with Texas Department of Transportation research project for Public Involvement.

Awards and Recognitions

Dean's Student Advisory Council

Aviation Science and Technology: Edgar Moreno

Biology: Rachel Guthrie, Chi Tam Nguyen, Olusegun Ogunniyi

Chemistry: Melody Roberson

Computer Science: Narada Walker

Environmental Science and Technology: Terrell Gibson

Industrial Technology: Jermaine Potts

Mathematics: Aqeeb Sabree

Physics: Landra Williams

Transportation Studies: Vernaldo Wright

College Student Ambassadors

Miss TSU: Shartajeye Wright

Miss COST: Shamail Allen

Mr. COST: Jonathan Jolivet

Aviation Science and Technology: De'Carla Greaves

Biology: Andrew Abraham, Olusegun Ogunniyi, Minerva Coleman-Carter

Chemistry: Nathaniel Carter, Ray Mbonu

Computer Science: James Leslie, Osman Ahmed, Narada Walker

Engineering Technology: Yemisi Ishola

Environmental Science and Technology: Shaunté Hulett-Abdin

Industrial Technology: Kendrick Lyons

Mathematics: Aqeeb Sabree, Olivia Turner, Ruqiah Muhammad

Physics: Samantha Everett, John Metyko

Transportation Studies: Alex J. Jackson, Chelse Hoover, Vernaldo Wright

COST Faculty and Staff Scholarship

Ariam Abraham, Biology
Peggy Adolph, Transportation Management
Osman Ahmed, Computer Science
Mohammad Ali, Biology & Chemistry
Alfonso Arteaga, Maritime Transportation
Michelle Ayers, Biology
Karine Bah, Biology
Demarcus Foster, Industrial Technology
Kenrick Gardiner, Civil Engineering
Raven Johnson, Computer Science
Idris Karimjee, Mathematics
Gyu Rang Lee, Biology
Erik Lege, Electronic Engineering
Ray Mbonu, Chemistry
Chima Ndidiamaka, Chemistry
Nalova Ndiva-Mongoh, Biology
Chi Tam Nguyen, Biology
Anita Ofori, Biology
Graceland Ogueri, Biology
Destiny Omeire, Electronic Engineering
Kwadwo Osei, Biology
Kingsley Sampson, Electronic Engineering
Joseph Ugo, Biology
Alozie Ujoatu, Biology
Amoge Uwalaka, Chemistry

Joseph Flowers Scholarship

Eugene Ansah, Chemistry
Nicollete Manning, Biology
Arete Eigbe, Biology
Sarah Sejero, Biology
Sharon Kwende, Biology

Undergraduate Research Enrichment Scholarship

Jose Cabrera, Mathematics
Jazmine Irving, Mathematics
Tameike Washington, Biology

Graduate Research Enrichment Scholarship

Ming Bao, Computer Science
Jairam Bodapati, Environmental Toxicology
Fadila Ghiat, Computer Science
Chelse Hoover, Transportation Management
Chakravarthy Koricherla, Chemistry
Sharmila Timilshina, Environmental Toxicology
Jinghui Wang, Transportation Management
Chenyu Wang, Computer Science
Vernaldo Wright, Transportation Management
Zhang, Zhao, Computer Science

Outstanding Student Award

Aviation Science and Technology: Larry Frost (UG)

Biology: Dominique N. Sapp (G)
Olusegun A. Ogunniyi (UG)

Chemistry: Tiffany Gurley (G)
Tierra Johnson (UG)

Computer Science: Isidro Cristian Cervantes (G)
Narada Walker (UG)

Engineering Technology: Edilberto M. Mendez (UG)
Mehdi K. Rikkaei (UG)
Yemisi Ishola (UG)

Environmental Science and Technology: Sarah Munyu (G)
Siobhan Tarver (G)

Industrial Technology: Bennie Jordan, III (G)
Arizbeth Ruvalcaba (UG)

Mathematics: Jessica Maggie Poole (G)
Ruqiah Muhammad (UG)

Physics: Micheal Smith (UG)

Transportation Studies: Da Li (G)
Anthony Flenoy (UG)

G, Graduate
UG, Undergraduate

College Distinguished Alumni Awards

Vernon Baker, M.S. (Aviation Science and Technology)

Academic Advisor, Department of Aviation Science and Technology, TSU

Mr. Baker joined the United States Air Force and became an Air Traffic Controller, stationed at Carswell Air Force Base, in Fort Worth, Texas. Mr. Baker was hired by the Federal Aviation Administration (FAA) in September, 1978. In March 1983, Mr. Baker began working for the Houston Police Department as an Emergency Communications Dispatcher and eventually transferred to the Aviation Department at Bush Intercontinental Airport (IAH), where he worked his way up from an Operations and Safety Officer to Assistant Director of Operations. He worked for the FAA from 1997 to 1999 as a Civil Aviation Security Specialist at IAH and was the alternate K-9 coordinator for the K-9 Explosive Detection Program.



Arnold K. Carothers, M.D. (Biology)

Family Medicine Clinic, Houston, Texas

He completed his medical education at The University of North Texas Health Science Center College of Osteopathic Medicine. He is a Diplomat of the American Academy of Family Physicians. He has practiced family medicine for the past 17 years. Dr. Carothers did his residency training in Beaumont, Texas at St. Elizabeth Hospital. Following his residency training, he served his country in the United States Navy caring for our servicemen and their family members at an overseas duty station in Okinawa, Japan.



Charlotte Baker, Ph.D. (Chemistry)

Harris County Institute of Forensic Sciences Houston, Texas

Dr. Baker received her Ph.D. degree in Environmental Toxicology from Texas Southern University. She also holds a Bachelor of Science degree in Chemistry from Sam Houston State University and a Master of Science degree in Chemistry from TSU. Dr. Baker has won numerous honors and awards such as the Proctor and Gamble Fellowship Award, and the Agilent Technologies Graduate Development Fellowship. She has also received the Research Centers Minority Institutes Graduate Research Assistantship and Ph.D. Environmental Toxicology Fellowship. Dr. Baker was an Environmental Medicine Rotation Program Fellow for CDC/ATSDR through the Association of Minority Health Professions Schools.



Sovandara Chea, B.S. (Computer Science)

Continental Airlines Headquarters, Houston, Texas

Sovandara Chea is currently a full time employee at Continental Airlines headquarters in Houston. He received his B.S. degree with Magna Cum Laude honors in Computer Science at TSU in 2009. He is currently a graduate student in the Computer Science Department with a 4.0 GPA for his graduate classes. His Masters thesis is concentrated on Wireless Sensor Networks.



Bryce Redhead, B.S. (Engineering Technology)

Field Engineer, General Electric, Houston, Texas

With an Interest in Aquatic Science, he joined the US Navy and served for four years as an Electronic Technician. After returning home, Bryce resumed his studies at TSU where he obtained a bachelor's degree in Electronic Engineering Technology in 2009. He accepted a job in Washington D.C with Honeywell, where he worked on Base Perimeter Security Systems and provided software and hardware network capabilities and corrections. After a year, looking to broaden his horizons for an opportunity in oil and gas, he returned to Houston, to work as a Field Engineer at General Electric.



College Distinguished Alumni Awards

Noreen Khan-Mayberry, Ph.D. (Environmental Science and Technology)

NASA Johnson Space Center, Houston, Texas

Dr. Noreen Khan-Mayberry is an environmental toxicologist, space toxicologist and technical expert on food toxicity, environmental remediation, and green technologies. Currently, Dr. Khan-Mayberry is on assignment at NASA's Jet Propulsion Laboratory where she serves as a Safety Officer, Scientific Technical Expert and Technical Management for the NASA Office of Inspector General.



Peter A. Stoute, B.S. (Industrial Technology)

OST/Alameda Corridors Redevelopment Authority, Houston, Texas

In 2006, he enrolled at Texas Southern University where he decided to pursue a degree in Construction Technology. In 2010, he graduated Cum Laude with a Bachelor of Science degree from the Department of Industrial Technologies. During his matriculation through Texas Southern University, Peter worked as a student assistant in the College of Science and Technology where he worked closely with faculty and students in the Construction Technology program. Peter has received several training certificates relative to Computer Technology.



Roderick B. Holmes, Ph.D. (Mathematics)

Department of Mathematics, Texas Southern University, Houston, Texas

Dr. Holmes earned his Ph.D in Mathematics from the University of Houston in 2003. Dr. Holmes has served in the Tutorial Ministry, and on the Audio Visual and TV committee at Lily Grove Baptist Church. He was an editor for the Lily Grove's Radio and TV Broadcast "A Call to Joy", Pastor, Terry K. Anderson. He serves on the COST Alumni Steering Committee and the University's Council on Admissions. He also serves as an advisor for the Society of Urban Mathematicians (SUM) which is an organization made up of Mathematics Majors. He is a member of the TSU National Alumni Association and TSU Alumni and Friends at Lily Grove Baptist Church.



Brandon A. Georgetown, B.S. (Physics)

H-LSAMP Bridge to Doctorate Program, University of Houston, Houston, Texas

Mr. Georgetown attended TSU on a full scholarship through the Frederick Douglass Honors Program and the Houston Louis Stokes Alliance for Minority Participation (H-LSAMP) program. He held the position of Vice-President for the Society of Physics Students. He was awarded a fellowship at Tuskegee University's Center for Advanced Materials, conducting research on the environmental effects of carbon fibers reinforced with nanotubes. In 2011 Mr. Georgetown was accepted into the H-LSAMP Bridge to the Doctorate fellowship program at the University of Houston where he is currently enrolled in the Ph.D. program in Civil and Environmental Engineering.



John B. Etta, M.S. (Transportation Studies)

Port of Houston Authority, Houston, Texas

John B. Etta is the Facilities Manager for Barbour's Cut Terminal and the Bayport Container Terminal of the Port of Houston Authority. He oversees construction, staffing, training, and supervision of office personnel. In addition, Etta oversees the Barbour's Cut Intermodal Rail facility and works closely with all railroad companies servicing the Port of Houston Authority. Etta joined the Port Authority in July 1994 as an Assistant Operations Manager at the Barbour's Cut Terminal. In 2001, he was promoted to Intermodal Administrative Manager where he trained and supervised all of the Barbour's Cut gate personnel in the implementation of the Navis Sparcs and Express system.



Faculty and Staff Annual Campaign

COST Faculty Donate \$ 21,506 to TSU Faculty and Staff Campaign

The 2012 TSU Faculty and Staff Campaign theme is "Charity Begins at Home: Showing Our Strength in Our 85th." The faculty and staff of the College of Science and Technology donated a total of \$21,506 to the COST Student Scholarship Fund. The college recognized the participation of its faculty and staff at four contribution levels. Platinum (\$1,000 and above), Gold (\$500 - \$999), Silver (\$250 - \$499), and Bronze (\$5 - \$249).

The faculty and staff of COST were awarded the Top\$ Award for their support of the 2012 Annual Faculty-Staff campaign. The funds raised by the Faculty-Staff Campaign go toward supporting student scholarships. The COST campaign ambassadors are to be commended for their work in facilitating the contributions. The COST ambassadors are Paula L. Eakins, Nia Eakins, Tioka L. Freeman, Shirley L. Harris, Nadereh Jahed, Rachel Mizzell, Lulueva A. Nasser, Helen Pittman-Cockrell, Delois Smith - Johnson, and Charlotte S. Whaley. Dr. Oscar H. Criner is the COST representative on the University Faculty-Staff Campaign Committee and Dolly Spencer is the University ambassador for COST.

Platinum Level

Oscar Criner
James DuMond
Marian Hillar
John Sapp
Willie Taylor
Ursula Williams
Lei Yu

Gold Level

Desiree Jackson
Wei Li
Warren Williams
Bobby Wilson

Silver Level

Della Bell
Maria Burns
Paula Eakins
Hyun-Min Hwang
Carol Lewis
Michael Miller
Robert Nehs
Audrey Player
Yi Qi
Fengxiang Qiao
A. Serpil Saydam
Dolly Spencer
Carrington Stewart
Momoh Yakubu

Bronze Level

Fawzia Abdel-Rahman
Baqui Abdullah
Boma Afiesimama
Raymond Agbanoci
Alfonso Arteaga
Vernon Baker
Maruthi Bhasker
Daniel Bessis
Brandi Butler
Xuemin Chen
Latissha Clark
Jade Q. Clement
Shahryar Darayan
Yuanjian Deng
Ronald Dilly
Ulysses Dotson
Nia Eakins
Obot Ekwere
Pearlie Fennell
Robert Ford
Tioka Freeman
Charles Glass
Khosro Godazi
Gwen Goodwin
Carlos Handy
Maribel Handy
Shirley Harris
Mark Harvey
Mario Holloman
Roderick Holmes
Jesse Horner

Sharon Hudson
Nadhereh Jahed
Mohsen Javadian
Nadereh Jahed
John Javadi
Mohsen Javadian
Mackale Joyner Farrukh
Khan
Denita Lashore
Jonathan Lewis
Chengfeng Lin
Carl Lott
Li Ma
Hector Miranda
Rachel Mizzell
Lulueva Nasser
Christopher Odetunde
David Olowokere
Shodimu Olufemi
Helen Pittman-Cockrell
Marcia Robin
Mary Rollins
Jason Rosenzweig
Mahmoud Saleh
Shishir Shishodia
Tarsem Singh
Aladdin Sleem
Delois Smith-Johnson
Ayodotun Sodipe
Alamelu Sundaresan
Hosein Tahvilian

Pratap Talusani
Graham Thomas
Michelle Tolbert
C. J. Tymczak
Daniel Vranceanu
Xin Wei
Charlotte Whaley
Daryl Wilkerson
Tong Wu
Yuhong Zhang



UNITE STEM Summer Program

The US Army Educational Outreach Program, Virginia Polytechnic Institute and Virginia Tech have chosen Texas Southern University's Department of Engineering TEchnology as one of only 9 universities in the country to host a summer UNITE program for rising 9th through 12th students.

TSU's Department of Engineering Technology submitted a very competitive proposal, and after going through an extremely strenuous vetting process, TSU was selected out of over 50 universities

to host this prestigious program.

UNITE is a four-to-six week, pre-collegiate summer program for talented high school students from groups underrepresented and underserved in STEM fields. This initiative is part of the portfolio of outreach efforts contained in the US Army's Youth Science Cooperative Outreach Agreement Activities during this summer program will include: providing college prep workshops (with an optional SAT/ACT test preparation component) to give students an



idea of what it takes to get into college engineering programs; classes taught by qualified high-school teachers or college instructors; a hands-on program, which includes rigorous classroom instruction that prepares students for admission into college level engineering tracks; and a career day to increase overall stem awareness.

CRCN STEM Enchantment Program

The Center for Research on Complex Networks (CRCN) Science, Technology, Engineering and Mathematics (STEM) Enchantment Program, began on June 27, 2012 and ended on July 27, 2012. The closing ceremony took place in the Nabrit Science Center at 1:30 pm.

This summer, students attending the STEM Enchantment Program participated in four classes: Reading and Mathematics, Concepts of Science, Programming, and Robotics. In the Programming class the students learned how to write simple programs using Visual Basic. They were taught the joys of chemistry as well as physics in Concepts of Science which included hands on participation in chemistry and physics experiments. In the reading and mathematics class the students studied problem-solving and reading to gain a better understanding and develop problem-solving skills. In the Mathematics class, the students

read a classic book titled "The Education of T. C. Mits" by Lillian and Hugh Gray Lieber. The students were introduced to four fields of mathematics: algebra, arithmetic, geometry, and analytic geometry. In the Robotics class, students learned the techniques required to build and program a VEX Robot, while learning team-building skills.

The students attended two field trips. The first was to the Houston



Museum of Natural Science. Students viewed the Permanent Exhibits, and the Cockrell Butterfly Center. They watched a movie entitled "Earth's Wild Ride" in the Planetarium. In the Wortham Giant Screen Theatre, the students viewed a film entitled "Flying Monsters 3D." This film is about a grandfather and granddaughter who watch a solar eclipse from scenic cliffs overlooking their moon colony. The second field trip was to the George Observatory. The students visited the Challenger Center and they completed the Mega Full Mission. The students spent half of their time as astronauts aboard the spacecraft and the other half at the consoles in Mission Control. All students were able to play the role of astronaut and mission controller. They also attended a day class entitled "Our Neighborhood in Space: The Solar System." The students learned about our solar system, including the planets, sun, moons of the planets, comets, asteroids, and more.

Student Organizations

Institute of Transportation Engineers Student Chapter

Texas Southern University's Institute of Transportation Engineers Student Chapter recorded another successful and rewarding year. The ITE Student Chapter continued to grow this year, and numbers of new members were recruited into the Chapter. The aim of this chapter is to provide our student members a platform for outreach and

networking with transportation professionals working in local industry and government. To accomplish this goal, the chapter has hosted professional seminars and luncheons, held regular monthly meetings, and attended professional conferences during the past year. With the assistance of the ITE advisors and officers, ITE members have received several

awards and scholarships, including the TexITE Scholarship, Dwight David Eisenhower Fellowships, NDTA Association for Global Logistics and Transportation, Helen M. Overly Memorial Scholarship (WTS), and Conference of Minority Transportation Officials (COMTO) scholarship.



Health Occupations Students of America

Health Occupations Students of America (HOSA) is a nationally recognized organization endorsed by the US Department of Education and the Health Science Division of ACTE. Its network is comprised of more than 120,000 high school, collegiate, and professional members in all areas of healthcare with more than 3,200 chapters across the United States. The mission of HOSA is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development of all health science technology education students, therefore, helping students to meet the needs of the health care community. The HOSA Chapter of Texas Southern University was,

founded in February 2012 by Chi-Tam Nguyen, a former high school HOSA member who felt the need for expanding the limited health-oriented organizations offered on campus with distinctive goals and strict requirements. TSU HOSA welcomes any students pursuing pre-nursing, pre-dental, pre-pharmacy, and pre-medical careers with GPAs above 3.1.

Members participate in volunteer activities throughout the year. They also mentor students at urban schools throughout the Houston area and raise awareness of health-risks through opportunities such as the March of Dimes. Members also engage in health-related competitive events against other universities each year at the



state and national levels. In March 2012, TSU HOSA sent five members to the HOSA-State Competition. All members were recognized, and four qualified for the HOSA-National Competition. Christine Pham placed 1st in Epidemiology, Chi-Tam Nguyen placed 1st in Sports Medicine, Marisol Solorzano placed 2nd in Medical Terminology, Sheryl Duruewuru placed 2nd in Medical Math, and Tre'lon Land placed 5th in Pharmacology.

International Collaborations



Undergraduate Research Internship at BJTU

Dr. Bobby Wilson, Principal Investigator of the National Science Foundation Historically Black Colleges and Universities Undergraduate Program (NSF HBCU-UP) accompanied two Texas Southern University undergraduate students to Beijing, China to participate in an eight week undergraduate research



experience at Beijing Jiaotong University, (BJTU). The program was sponsored by the National Science Foundation's HBCU-UP program. The two students are David Taylor, chemistry major and Corey Williams, biology major. The students had a great experience learning cell and molecular biology techniques employed in biomedical research.

COST to be Part of Collaborations with China

Dean Lei Yu was a member of a TSU delegation led by President John Rudley that traveled to China in late May 2012 to explore collaborative opportunities with Chinese universities. The delegation formally signed an agreement with the Confucius Institute Headquarters in Beijing (Hanban) to establish a Confucius Institute at TSU in partnership with Beijing Jiaotong University. The delegation also signed agreements with Beijing Jiaotong University and Shanghai Second Polytechnic University to promote student

exchanges, joint academic programs, and faculty collaborative research. The delegation also visited the University of Macau to explore collaborative possibilities.



Aviation Science and Technology

The Department of Aviation Science and Technology named Vernon J. Baker as the new Program Coordinator. Mr. Baker is a graduate of TSU with B.S. in Aviation Science & Technology and a Masters in Transportation Studies. A former Air Traffic Controller and Federal Security Director for TSA at Houston Hobby Airport and Assistant Director of Operations for the Houston Airport System, Mr. Baker envisions moving the program to higher heights and making it a novel attraction for prospective students.

Dr. Mark Sherman, Mr. Vernon Baker and Ms. Sharon Hudson represented the Department at the Aviation Accreditation Board International winter conference that was held in Auburn, Alabama, February 12-17. The department is seeking acceptance to this important entity. The conference afforded the attendees opportunities to network with other universities with similar programs and with members of the aviation industry. Workshops and educational sessions were attended to gather information in preparing for this accreditation process.

Dr. Sherman and Ms. Hudson presented at the Oklahoma State University Educational Symposium

in Stillwater, Oklahoma, April 18-19, 2012. Faculty members also attended the 2012 TxDot Aviation Conference held in Galveston, Texas, March 28-30.

Aviation Science and Technology students received three of the five scholarships awarded during the festivities at Houston's Hobby-Fest, April 21, 2012. As part of this year's event, the Allen T. Johnson Memorial Scholarship Committee invited participants to submit an abstract or paper, covering aviation related topics such as management, marketing, geography, operations, flight planning and a host of others. Judges reviewed those entries and awarded scholarship assistance to five contestants including Edgar Moreno-Rodriguez, Micah Harper, and Reginald Richardson. Each recipient was awarded \$1500.00 for their participation.

Texas Southern University December 2011 Graduate, Lindsey Robinson, will participate in University of Houston's Air Force Annual Graduation for commissioned officers. Lindsey received his commission as Air Force 2nd. Lieutenant, May 13, 2012.

Students in the Department of Aviation Science and Technology attended the Women in Aviation



Conference, March 8-11. The conference was very instructive for students seeking careers in the aviation industry. While networking with their peers, students attending the conference learned valuable tools and tips for success from seasoned aviation professionals at the College/University Student Meeting and Gathering.

December 2011 Magna Cum Laude graduate Jose Doblado was recently appointed as the Airport Manager for the Liberty Municipal Airport in Liberty, Texas. With a Bachelor of Science degree in Aviation Management, he will spearhead a major airport improvement plan that includes a 1200 foot runway extension, construction of twenty T-hangars, and other significant facility upgrades. The Department of Aviation Science and Technology is extremely proud of Jose and his accomplishments. He is a perfect example of how success is achieved at Texas Southern University.

On Saturday, May 12, 2012, graduates from Aviation Science and Technology proudly marched to the music of "Pomp and Circumstance." The faculty and staff congratulate Tamara Gavish, Benjamin Opara, Lee Reeves, and William Stewart on this important milestone.



The Department of Biology at Texas Southern University is the largest, and an integral academic unit within the College of Science and Technology. The department serves to advance the understanding and appreciation of biology, while encouraging critical thinking and experiential learning. Students are engaged in quality-driven educational experiences, through comprehensive teaching and research at the undergraduate and graduate levels. The faculty actively engage in research that advances knowledge in life and biomedical sciences while providing service and outreach to the larger community to fulfill relevant societal needs and advance the mission of the university.



The stated mission of the Department of Biology is threefold: (1) to provide the opportunity for all students who matriculate through Texas Southern University to become better informed regarding biological phenomena and life processes, as well as apply information and knowledge gained toward an improved understanding of man, society, the universe and the inherent interrelationship between said entities; (2) to provide undergraduate students with the

appropriate background in Biology that will allow them to pursue medical, biomedical, and other allied or related careers; and (3) to ensure that undergraduates who intend to matriculate in graduate programs in the biological sciences, or related areas, are adequately and competitively prepared to demonstrate mastery of biological concepts.

The department had a total of 96 students that graduated at the undergraduate level (Summer 2011, Fall 2011 and Spring 2012 commencements).

The department had 11 students that graduated at the Master's level (Summer 2011, Fall 2011 and Spring 2012 commencements). For the academic year Fall 2011 through Spring 2012, the department admitted 23 graduate students. Currently, there are approximately 16 applications for the graduate program in biology under review for the Fall 2012 Semester.

The faculty in the Department of Biology are actively involved in professional activities. The faculty serve as PI or Co-PI on a dozen



externally funded research and education grants. Faculty have been actively producing peer-reviewed publications: Dr. Alamelu Sundaresan (5), Dr. Marian Hillar (2), Dr. Mario Hollomon (2), Dr. Desiree Jackson (1), Dr. Olufisayo Jejelowo (6), Dr. Hector Miranda (1), Dr. Audrey Player (2), Dr. Jason Rosenzweig (4), Dr. Shishir Shishodia (2), Dr. Ayodotun Sodipe (6) and supporting student presentations at meetings.





The Department of Chemistry at Texas Southern University seeks to fulfill two primary missions. The department charge is to prepare students for professional careers in chemistry and eventually, graduate study. The Department is organized to give students, who are majoring in related fields, an understanding of fundamental techniques that will permit them to be successful in their chosen major. Each track is a composite program of study, and neither requires the declaration of an official minor in another academic discipline.

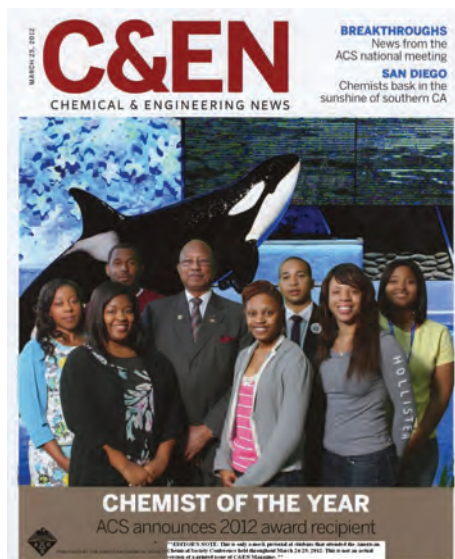
The Department of Chemistry is continually enhanced by the activities of its faculty and students in research, internships and faculty development. These processes have served to attract students to major in Chemistry here at Texas Southern University.

Students majoring in Chemistry and in programs that are housed in the department have been instrumental in obtaining competitive internships from various agencies across the country.

During the week of March 25-29, 2012, the national meeting of the

American Chemical Society was held in San Jose, California. Six Chemistry majors from Texas Southern University attended the meeting and made oral or poster presentations. They were accompanied by Dr. Bobby Wilson of the Chemistry Department. The students are identified in the picture of the Mock Cover of March 2012, ACS publication of Chemical and Engineering News. Presentations by Students at the ACS Conference were as follows:

David Taylor (back row, left) – Identification of Cell Cycle Regulators in Yeast, Texas A&M



University, College Station, Texas.

Janise Jackson (front row, second from the left) - The Effects Osteopathic Lymphatic Pump Technologies (LPT) on Blood Leukocyte Numbers in Rats with Lung Diseases.

Maria Williams (front row, third from the left) - A Kinetics Study of Cytochrome C and Cytochrome C Oxidase.

Kyle Thomas (back row, far right) - Local Structure Determination of Oxygen Deficient Perovskites Using the Pair Distribution Function.

Shelby Hill (front row, far right) - HDAC3's Interaction with N-COR and GR using Co-Immunoprecipitation.

From June 4-August 10, 2012 Ms. Amber King, an undergraduate Chemistry major was chosen to participate in the University 2012 Undergraduate Research Program. Dr. John B. Sapp served as Ms. King's mentor and the title of her project was The Fries Rearrangement of Ester of 2-Naphthol.

The Department of Computer Science has a long tradition of commitment to excellence in teaching, research, and student services. We have an active service plan for students. The department offers the BS degree in Computer Science with a minor, a BS degree in Computer Science with Computer Networks Concentration; the MS degree in Computer Science; and a Ph.D. degree in Environmental Toxicology affiliated with the Department of Environmental Science and Technology. Our graduates are very well placed and recognized within the Computer Science professions, at both national and international levels.

During the past academic year, our faculty and staff made great efforts towards excellence in teaching, research and professional activities. Departmental research has been funded by an NSF Center for Research on Complex Networks (PI: Prof. Wei Li); a Homeland Security Center on Command Control and Interoperability for Advanced Data Analysis (PI: Dr. Lila Ghemri); Teaching JAVA introductory CS courses using web services, a subcontract to Illinois State University (TSU PI: Prof. Khaled Kamel); Nascent HPC Activities at an HBCU; TeraGrid 2011 (PI: Dr. Farrukh Khan). A number of research and education proposals, including the joint proposal with UH to NSF and the Title III proposal to TSU, have been submitted to funding agencies for the continued and innovative activities.

The faculty members have actively participated in many professional activities such as serving on the editorial board of the International Journal of Sensor Networks (Prof. Wei Li); EURASIP Journal on



Wireless Communications and Networking (Prof. Wei Li); and International Journal of High Performance Computing and Networking (Prof. Li). Prof. Singh has been working hard on his next academic book related to Conquering the SAT which will be published soon by McGraw-Hill. The faculty have also paid special attention to the development of TSU by their involvement in a number of University and College level activities. Prof. Mohsen Javadian and Dr. Lila Ghemri are actively involved with faculty senate; Prof. Oscar Criner and Prof. Aladdin Sleem have served as the Chair of College Strategic/Development Plans Committee, and University Curriculum Council respectively. Prof. Criner and Prof. Sleem also worked successfully together to develop a TSU course scheduling system whose first version was adopted by the University in the Spring of 2012. Prof. Lin and Prof. Handy served as the Coordinators for CS 116 and CS 117, respectively. Based on CS Faculty members' excellent performance during the last academic year, several faculty members and staff received awards and recognitions. For example, Prof. Li received the TSU Scholarly Research/Creative Activities Award in 2012.

The Computer Science Department organized monthly research seminars effective Fall of 2011. As the Coordinator of the research seminar, Dr. Ghemri has made key contributions by inviting the key speakers and in organizing the research seminars. Speakers have included Prof. Li speaking on Research Aspects in the NSF funded CREST Center at TSU; Prof. Chen (UHD) on An Unsupervised General Word Sense Disambiguation Method; Prof. Koushanfar (Rice Univ) on Trusting the Open Latent IC Backdoors; and Prof. Cohen (UT Health Science Center) on the Architecture of Insight - new representations for literature based discovery. The research presentations have made a clear positive impact on the faculty members, graduate students, and undergraduate students.

The Department is proud of its students in achieving various awards, scholarships, fellowships, and accomplishments during the academic year.



Engineering Technology

The Department of Engineering Technology offers courses in the academic disciplines of Civil Engineering Technology, Electronics Engineering Technology, and Computer Engineering Technology. The Bachelor of Science degree in aforementioned areas are offered at the undergraduate level. The Electronics Engineering Technology program in the College of Science and Technology is accredited by The Technology Accreditation Commission of the Accreditation Board for Engineering and Technology. The mission of the department is to provide high quality, application oriented curriculum in engineering technology. The curriculum is designed to prepare students for careers as engineering technologists who have the ability to understand new developments, adapt to change, embrace professional development opportunities and assume professional roles in their respective fields.

The Department has made tremendous progress over the last

12 months. Most noteworthy is the major increase in the level of research activities. Several of our students are participating in a newly-funded NASA research project on the structural monitoring of NASA Composite Overwrapped Pressure Vessels. Five of these students worked this summer out of the NASA Marshall center in Huntsville, Alabama. Our virtual and remote laboratory research activity remains very active. Three students are actively participating in this research, and we are in the process of expanding the scope of research activities to include many lab classes in the electronics and civil engineering technology programs. Students and faculty from the department in collaboration with Arizona State University participated this summer in developing novel technologies, tools, and advanced methods to balance immigration and commerce with effective border security. Moreover, the department has been actively engaged in activities related to the NSF-CRCN project providing the technology transfer component to



the overall project. It must be mentioned that the Department, in collaboration with UNITE-TSA, hosted its Sixth Annual Summer Pre-College Engineering Program, June 25-July 20, 2012. The 2012 program enrolled 28 students and provided workshops in the areas of biological sciences, architectural engineering, computer engineering, electronic engineering, aviation science and technology, maritime science, geothermal energy, and bio-mimicry engineering. The career day activity was attended by City of Houston representatives and Houston STEM industry representatives. Related to this is the participation of our NSBE chapter in tutoring sessions with the Middle school students of Walipp Academy. This and similar other various Chapter activities has earned our Chapter the prestigious award of "best new organization" on campus.

The department is preparing a portfolio for the upcoming reaccreditation of our electronics engineering technology program; and a team will be visiting the civil engineering technology program this fall to provide a program pre-accreditation review.

Finally, Dr. Xuemin Chen and Dr. Graham Thomas received tenure and promotion this year.



Environmental Science and Technology

The Department of Environmental Science and Technology had a very productive year as the academic home of the environmental toxicology doctoral and master's degree programs, both of which had a very successful external review. During the academic year, the department improved its web presence with increased curriculum development and recruitment efforts. The department received a total of 24 applications for the Ph.D. program and 28 for the MS degree program after the initiation of a new non-thesis MS degree track. These programs are definitely being seen worldwide as applications came from as far as Nigeria to Saudi Arabia to Nepal and more locally from Texas and Louisiana. Of these applications, acceptance letters were sent to 8 of the Ph.D. degree and 9 MS degree applicants, making this year a recruitment success.

The program graduated four doctoral students: Dr. Jamie Dooley-Renfro - Diruthenium as a Potential Anticancer Agent "A Screening Study", Advisor, Dr. John B. Sapp; Dr. Terrell Gibson-Bio-Assessment of Human Health from Chronic Metal Burden in the Urban Environment, Advisor, Dr. Renard Thomas; Dr. Ralph Ross-Models of Animal Waste in the Environment with Implications for Human Health, Advisor, Dr. Oscar Criner; Dr. Adetoun Oyinola - A Novel Approach to Drinking Water Treatment Using Photocatalytic Titanium Dioxide (TiO₂) On Single Wall Carbon Nanotubes (SWCNTs), Advisor, Dr. Bobby Wilson. The program graduated three Masters students: Ogochukwu Adaikpoh - Environmental Monitoring of

Chemicals in Semi-public and Commercial Swimming Pools in Northeast Houston, Advisor, Dr. Mahmoud Saleh; and the first non-thesis Masters: Christopher Felan and Florence Sibetya.

Student activities: Ms. Siobhan Tarver has been awarded the NASA Harriet Jenkins Fellowship. Ms. Samrawit Yeshitla has been awarded a research assistantship as part of a NASA grant entitled "Dependence of Radiation Quality on Charged Particle-Induced Early and Late Damage in Chromosomes"; a collaboration project with NASA Johnson Space Center and Oxford Brookes University.

As a result of the willingness of the university's administration to grow the department, three new tenure-track faculty positions have been filled. The first of these new positions was filled by an individual with a strong geology education and research background, Dr. Maruthi Sridhar B. Bhaskar. His skill set offers the best possible instruction for our Geology 141 non-majors course and brings an additional area of expertise to the environmental toxicology graduate program. The two additional positions were filled by individuals with strong environmental education and research in an environmental toxicology related field; Drs. Hyun-Min Hwang and Momoh Yakubu. Fulfillment of these positions has made the department well suited to continue its mission of providing students with the appropriate background in environmental toxicology allowing them to pursue careers in industry or governmental agencies in the

areas of environmental impact, risk assessment, and hazard mitigation.

In keeping with the need to prepare a workforce at all levels of environmental science education, the department will pursue plans for the development of an undergraduate major in geoscience and a J.D./Ph.D. degree program in environmental toxicology.



Industrial Technology

The primary mission of the Department is to offer programs of study designed to prepare students as "management-oriented technical professionals" who have practical knowledge, competencies, skills, and training to serve and function in the industrial/manufacturing enterprise system. In pursuing this mission, the Department seeks to prepare industrial technologists and technical managers for career opportunities in the construction, communications, and manufacturing industries.

The Department of Industrial Technologies offers the Bachelor of Science degree in which students have two program options to select from construction technology or design technology. The Department also offers the Master of Science degree.

The Department has a very active advisory committee that met two to three times during the 2011-2012 academic year. This committee is composed of technical professionals, alumni, and faculty. The committee made several recommendations relative to program course offerings that resulted in the re-development of two construction courses.

The Department received scholarship monies for the Maurice Chevalier Scholarship – established by the family of a former TSU student, that is available to any California resident majoring in Industrial Technologies.

During the past academic year, the Department offered courses using the Aveva Piping Design Software. This software is state of

the art and will provide our students with the necessary training to become certified piping designers.

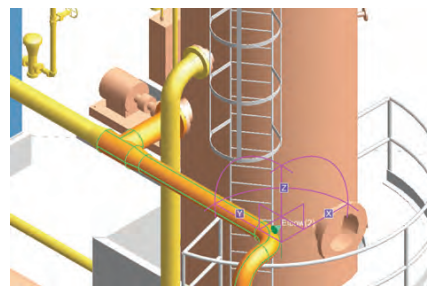
During the 2011-2012 academic year, the Department offered courses in Construction, Design, Industrial Technology, and Manufacturing that served more than 500 students and generated approximately 1,300 student credit hours. The Department offered online courses during the 2011-2012 academic year. An online course was developed for ITechnical Writing, Industrial Supervision and Management, and Industrial Labor-Management Relations. There are additional courses being considered for online presentation in the future.

In April 2011, the Department received a re-accreditation visit by the Association of Technology, Management, and Applied Engineering (ATMAE). Dr. Marvin Sarapin, Professor of Graphic Design at Purdue University conducted a site-visit to review program offerings, program support, and overall compliance with ATMAE standards. Drs. DuMond and Horner traveled to the Annual Conference in Cleveland, OH, November 8-11, 2011 where the board re-accredited program offerings.

During the 2011–2012 academic year, the following students were awarded internships with TSU Facilities Planning Department: Amber Thorne (Design Technology), DeMarcus Foster (Construction Technology), Jermaine Potts (Design Technology), Jessica Story (Design Technology).

Future plans of the Department are to re-establish the following student chapters of national organizations: Association of General Contractors, American Design Drafting Association, and Association of Technology, Management, and Applied Engineering.

The Department of Industrial Technologies will continue to develop new initiatives and teaching methods to enhance student learning experiences. The Department anticipates an increase in enrollment, retention, and graduation rates with the completion of the new technology facility.



The Department of Mathematics offers the Bachelor of Science degree in mathematics and a minor in mathematics for students majoring in other academic disciplines at the University, and provides service courses for non-major students. During the 2011-2012 academic year, the department served close to four thousand students, offered approximately 120 courses and graduated six mathematics majors, three in December 2011 and three in May 2012. In addition, one graduate student, George Kwayuki, received his Master of Science degree in May 2012, and two graduate students received their Master of Science degrees in August 2012. The graduate students' theses were supervised by Drs. Nehs and Taylor.



Dr. Kiran Chilakamarri and Dr. Nancy Glenn each published a research paper and Dr. Saydam's paper has been accepted for publication. Drs. Bell, Chilakamarri, Evans and Saydam gave various presentations at local and regional workshops or conferences. Drs. Nehs and Taylor supervised two student presentations. Seven grant proposals were submitted by Drs. Chilakamarri, Glenn, Holmes, Kazakos, Nehs, Saydam and Taylor.

Dr. Raegan Higgins from Texas Tech University gave the Dr.

Llayron L. Clarkson Research Seminar which was organized by Dr. Saydam. Drs. Holmes and Saydam reactivated the student organization, Society of Urban Mathematics, SUM in Fall 2011. Dr. Holmes was recognized as a mathematics department distinguished alumnus and Dr. Guha retired after 41 years of service.

Students Ruqiah Muhammad and Jessica Poole received the Outstanding Student Undergraduate and Graduate awards respectively. Faculty and students attended the NAM Math Fest Conference and the Fifth Annual Iowa Mathematical Field of Dreams Conference.

Three Mathematics Majors, Ariel Bowman, Jose Cabrera and Jazmine Irving were awarded the Adrienne Elaine Taylor Memorial Scholarship, and Ariel Bowman, Jose Cabrera, Jazmine Irving, Ruqiah Muhammad, and Aqeeb Sabree were awarded the High Achievement in Mathematics Possible certificates. Additionally, graduate student Jessica Poole received a HAMP Scholarship as well as a certificate of excellence.

Several students were selected to attend summer programs this year: Ariel Bowman at the University of Iowa Biostatistics Institute; Aqeeb Sabree at Rice University and Texas Medical Center; Valerie Tolbert at Rice University; and Narada Walker at BP. Andrea Braddy and Mariam Nakyobe interned at TSU with Undergraduate Research Fellowships; and Jose Cabrera and Jazmine Irving at TSU with the L.L. Clarkson Mathematical Research Experience.



The Department of Mathematics had an undergraduate program review in this academic year 2011-2012. The Mathematics Undergraduate Program Review occurred primarily through a process of self-study complemented with external review. Dr. Philip Kutzko from University of Iowa, Dr. W. James Lewis from University of Nebraska-Lincoln and Dr. Ken Smith from Sam Houston State University



visited the Texas Southern University campus on February 22-24, 2012 for the review. The external reviewers identified departmental strengths and challenges and recommendations for improvement. The department is looking forward to working with the College and the University to address these recommendations.



Physics

The Physics Department has continued to make excellent progress in its academic mission to elevate its educational and research effectiveness during the 2011–2012 academic year. Chief amongst these is the graduation of six undergraduate physics majors in May 2012. They are Hieu Nguyen, John Metyko, Addie-Malissa Chinn, Jerald Watley, Cassandra Oduola, and Micheal Smith. Of these, four are African Americans and of the group, three will continue on to graduate programs immediately. Mr. Smith was recruited by Berkeley, UT-Austin, Texas A & M University, Colorado State University, and several other schools. He decided to attend TAMU-College Station to study Health Physics. Mr. Nguyen will be attending graduate school in Bio-Engineering at the University of Southern California. Mr. Metyko is employed as a full time junior radiation safety officer at M.D. Anderson Cancer Center, and was also accepted into the online M.S. program in Health Physics offered through the University of Texas at Austin. The remaining three will pursue graduate careers within the next year. Additionally, Mr. Watley has secured an entry position as a geophysicist. Since May 2010, nine B.S. Physics majors have been produced. Seven of these were Black/African-Americans. Five students (all but one African American) were produced through the Health Physics track (the only program of its kind in all of Houston) thanks to the efforts of Dr. Mark Harvey, Assistant Professor of Physics.

Despite recent actions by the Texas Higher Education Coordinating Board (THECB)



affecting the existing B.S. degree in physics, recent communications strongly suggest that the THECB will approve the Texas Physics Consortium (TPC) which will still allow TSU to offer B.S. degrees in physics through the TPC. This Consortium consists of TSU, Prairie View A & M University, and six other Texas wide physics programs. The TPC represents 100% of all Texas Black physics programs, with TSU taking the lead through the recent production of B.S. Physics degrees by African Americans. It should be noted that one major reason for the THECB approval of the proposed Consortium is the supportive environment provided for African Americans interested in Physics careers. Overall, Texas only produces on average 4-5 Physics B.S. degrees awarded through all State schools to African Americans. In 2010, TSU produced 40% of the State's output of African American B.S. Physics recipients. In 2012 it should surpass this approaching a level of nearly 50–60%.

Paralleling these academic successes, various physics faculty

have attained major milestones in their respective research endeavors. The most important of these was the award of an NSF-CREST grant of close to \$5,000,000 in the area of Complex Networks. This effort involved three interrelated research groups, one of them led by Dr. Christopher J. Tymczak, CO-PI and Associate Professor of Physics. This research subgroup is also supported by Dr. Daniel Vrinceanu, Scientific Investigator and Assistant Professor of Physics. Both investigators represent significant capabilities in large scale computing, an important component of the CREST-Center. They were also successful in acquiring additional NSF funding (\$220,000 through the Major Research Instrumentation program) in support of the existing High Performance Computing Center (HPCC) originated and supported by the Physics department, serving the advanced computing needs of the College. The CPU upgrade to the HPCC will be competitive with the high performance computing capabilities at the University of Houston.

Transportation Studies

The Department of Transportation Studies has a mission to provide comprehensive transportation education that builds on the latest data, systems, and technologies. This mission is exemplified through quality instruction, cutting edge research activities of faculty members, and outstanding service to students and community. Currently, the department offers a Bachelor of Science degree in Maritime Transportation Management and Security, a Master of Science Degree in Transportation Planning and Management, and is affiliated with the Ph.D program in Environmental Toxicology and the Ph.D. program in Urban Planning and Environmental Policy. The department prepares students for careers in a variety of positions in public and private transportation-related agencies and organizations.



The department provided students various opportunities to work with transportation experts and to participate in research activities. Various workshops, seminars, conferences, and field trips have been offered to students to enhance their learning outcomes. Most importantly, the department offers Research Assistantship opportunities to graduate students so that they can engage in research. Scholarships sponsored by the Port of Houston Authority (PHA) are provided to undergraduate students

on the basis of outstanding academic performance. During the 2011-2012 academic year, 28 graduate students received research assistantships, and 30 undergraduate students received scholarships from the department, totaling \$763,400. In addition, a high percentage of students in the department have received various external and internal awards, indicative of the quality of the students and the academic programs.

Recently, through collaborations with four other institutions, the department has successfully won a new Tier 1 National University Transportation Center (UTC) award, which brings amount of \$600,000 per year to TSU. In this academic year, 100% of the tenured/tenure-track faculty members have received external grants through internal and external collaborations. The department also promoted and established global collaborations with international institutions. Due to the exemplary faculty and coruscating students, and their brilliant accomplishments, the Department of Transportation Studies won the Provost's Department of the Year Award for 2011- 2012.



Research Funding

Name	Award Amount	Title	Agency	Funding Period
Balaji Bhaskar, MS	\$10,860.00	Monitoring Agricultural Sewage Sludge 2010	Bowling Green State University/University of Toledo/U.S. Department of Agriculture	11/1/11-6/30/12
Bessis, Daniel	\$33,194.00	Center for Gravitational Wave Astronomy	University of Texas at Brownsville and Texas Southmost College/ National Aeronautics and Space Administration	9/1/11-8/31/12
Bessis, Daniel	\$65,540.00	New Methods in Special Analysis for Noisy Time-Series Data (Amendment No. \$ Cost-Reimbursable UTB08-01	University of Texas at Brownsville and Texas Southmost College/ National Science Foundation	11/1/11-10/31/12
Chen, Xuemin	\$153,761.43	Sub-Award Agreement No. C12-00429 between the Texas Engineering Experiment Station and Texas Southern University	Texas Engineering Experiment Station	1/15/12-1/15/15
Ghemri, Lila	\$7,000.00	Center of Excellence for Command, Control and Interoperability	Rutgers, The State University of New Jersey/U.S. Department of Homeland Security	7/1/11-12/31/11
Ghemri, Lila	\$12,000.00	Center of Excellence for Command, Control and Interoperability	Rutgers, The State University of New Jersey/U.S. Department of Homeland Security	7/1/11-6/30/12
Godazi, Khosro	\$1,500.00	Eisenhower HBCU Fellowship to Mr. Yang He	U.S. Department of Transportation/Federal Highway Administration	9/1/11-9/1/12
Godazi, Khosro	\$7,500.00	Eisenhower HBCU Fellowship to Ms. Da Li	U.S. Department of Transportation/Federal Highway Administration	9/1/11-9/1/12

Research Funding

Name	Award Amount	Title	Agency	Funding Period
Godazi, Khosro	\$5,000.00	Eisenhower HBCU Fellowship to Mr. Fei Tao	U.S. Department of Transportation/Federal Highway Administration	9/1/11-9/1/12
Godazi, Khosro	\$3,000.00	Eisenhower HBCU Fellowship to Mr. Garlin Wynn	U.S. Department of Transportation/Federal Highway Administration	9/1/11-9/1/12
Godazi, Khosro	\$5,000.00	Eisenhower HBCU Fellowship to Ms. Tingting Gu	U.S. Department of Transportation/Federal Highway Administration	9/1/11-9/1/12
Handy, Carlos	\$30,000.00	Historically Black Colleges and Universities Educational and Research Outreach Program in Nuclear Science and Engineering	University of Texas at Austin/U.S. Department of Defense - Navy	1/1/09-8/14/12
Handy, Carlos	\$20,000.00	Historically Black Colleges and Universities Educational and Research Outreach Program in Nuclear Science and Engineering	University of Texas at Austin/U.S. Department of Defense - Navy	1/1/09-8/14/12
Handy, Carlos	\$50,000.00	Historically Black Colleges and Universities Educational and Research Outreach Program in Nuclear Science and Engineering	University of Texas at Austin/U.S. Department of Defense - Navy	1/1/09-8/14/12
Hwang, Hyun-Min	\$274,682.00	Evaluation of Alternative Abrasives and Snow Plowing Practices and Road Sweeping/ Vacuuming as Source Control BMPs for Load Reduction of Fine Sediment Particles and Particle Associated Phosphorus in Urban Roadway Stormwater	U.S. Department of Agriculture Forest Service	4/5/12-12/31/13

Research Funding

Name	Award Amount	Title	Agency	Funding Period
Kamel, Khaled	\$5,000.00	Service Oriented Paradigm Across Introductory Information Technology Curricula	Illinois State University/ National Science Foundation	1/1/12-6/30/13
Lewis, Carol	\$290,000.00	Petrochemical Transportation Security	U.S. Department of Homeland Security	7/1/11-6/30/12
Lewis, Carol	\$19,000.00	Agreement between The University of North Carolina at Chapel Hill and Texas Southern University	University of North Carolina at Chapel Hill/ U.S. Department of Homeland Security	7/1/11-12/31/11
Lewis, Carol	\$19,000.00	Agreement between The University of North Carolina at Chapel Hill and Texas Southern University	University of North Carolina at Chapel Hill/ U.S. Department of Homeland Security	7/1/11-6/30/12
Lewis, Carol	\$5,903.00	Agreement between The University of North Carolina at Chapel Hill and Texas Southern University	University of North Carolina at Chapel Hill/ U.S. Department of Homeland Security	7/1/11-6/30/12
Lewis, Carol	\$100,000.00	Southwest Region University Transportation Center at CTR	Texas Transportation Institute	4/1/12-8/31/12
Li, W; Tymczak, CJ; Yu L	\$969,470.00	Center for Research on Complex Networks	National Science Foundation	9/1/11-8/31/12
Li, W; Tymczak, CJ; Yu L	\$112,996.00	Center for Research on Complex Networks	National Science Foundation	9/1/11-8/31/16
Olowokere, David	\$100,000.00	Evaluation of the Behavior of Optical Fibers for Structural Health Monitoring of Composition Pressure Vessel	UNCF Special Programs Corporation	11/23/11-9/30/12

Research Funding

Name	Award Amount	Title	Agency	Funding Period
Olowokere, David	\$24,160.00	2012 UNITE Summer Program	Virginia Polytechnic Institute and State University (Virginia Tech)/U.S. Army	4/6/09-9/15/12
Oyekan, Adebayo	\$770,000.00	Center for Bio-Nanotechnology and Environmental Research	National Aeronautics and Space Administration	10/1/10-9/30/13
Oyekan, Adebayo	\$230,000.00	Center for Bio-Nanotechnology and Environmental Research	National Aeronautics and Space Administration	1/24/12-9/30/13
Qi, Yi	\$215,184.00	Reduction of Motorists' Delay and Crash Potential Upstream of Highway Work Zones	Texas Department of Transportation	9/1/11-8/31/13
Qi, Yi	\$176,212.00	Design and Scope of Impact of Auxiliary Lanes	Texas Department of Transportation	9/1/11-8/31/13
Qi, Yi	\$23,998.00	Examining the Use of Existing Public Rights-of-Way for High-Speed Rail or Other Infrastructure	Texas Department of Transportation	9/13/11-8/31/13
Rosenzweig, Jason	\$6,387.00	Salary Reimbursement Agreement between The UT Health Science Center-Houston and TSU	University of Texas Health Science Center at Houston	6/1/12-6/30/12
Rosenzweig, Jason	\$12,755.56	Salary Reimbursement Agreement No. 12-076 between The UTMB at Galveston and TSU	University of Texas Medical Branch at Galveston	7/1/12-8/31/12
Shishodia, Shishir	\$13,281.00	Joint Admissions Medical Program	JAMP, Austin	09/01/11-08/31/12
Shishodia, Shishir	\$12,000.00	Medical School Matriculation Program	UTMB, Galveston	4/20/12-8/31/12

Research Funding

Name	Award Amount	Title	Agency	Funding Period
Sundaresan, Alamelu	\$100,000.00	Development of Technologies for Elucidation and Mitigation of Bone Loss in Microgravity, Osteoporosis and Inflammatory Disease	UNCF Special Programs Corporation	11/23/11-9/30/12
Sundaresan, Alamelu	\$42,500.00	Biotechnology and Bio Innate Immune System Research and Development Partnership in Astrobiology	UNCF Special Programs Corporation	5/1/11-7/31/12
Thmczak CJ; Vrinceanu, D; Khan, MF	\$220,000.00	MRI: Acquisition of HPC at Texas Southern University to Expand Capabilities for Research and Training through Shared High Performance Computing	National Science Foundation	9/15/11-8/31/13
Tymczak, Christopher J	\$60,000.00	Many Body Density Matrix Theory	Welch Foundation	6/1/12-5/31/13
Wei, Xin		Service Agreement between Baker Petrolite Corporation and Texas Southern University	Baker Petrolite Corporation	1/24/12-1/23/17
Wilson, B; Obot, V	\$475,084.00	Science and Technology Enhancement Program (STEP)	National Science Foundation	1/1/09-8/31/12
Wilson, Bobby	\$600,357.00	Dependence of Radiation Quality on Charged Particle-Induced Early and Late Damages in Chromosomes	National Aeronautics and Space Administration	9/21/11-9/20/14

Research Funding

Name	Award Amount	Title	Agency	Funding Period
Wilson, Bobby	\$45,000.00	Materials and Manufacturing Exploration in Support of Air Force Systems and Applications	Clarkson Aerospace Corp.	12/1/11-9/30/12
Wilson, Bobby	\$5,200.00	2012 Research and Engineering Apprenticeship Program	Academy of Applied Science	3/14/12-10/31/12
Wilson, Bobby	\$120,000.00	Agreement between Texas Southern University and On The Move Systems, Inc.	On The Move Systems, Inc.	9/1/11-8/31/12
Wilson, Bobby	\$192,500.00	Houston Alliance for Minority Participation - Senior Alliance	University of Houston/ National Science Foundation	9/1/11-8/31/12
Yu, Lei	\$20,000.00	TxDOT Research Technical Assistance Panels	Texas Department of Transportation	9/1/11-8/31/13
Yu, Lei and Qiao, Fengxiang	\$600,000.00	USDOT UTC TranLIVE	University of Idaho/U.S. Department of Transportation	1/1/12-12/31/13
Zhang, Yuhong	\$7,980.00	EAGER: A Study of Security Countermeasures for Cyber-Physical System	National Science Foundation	4/17/12-8/31/12

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BOOKS & BOOK CHAPTERS

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Conference Presentations

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Sundaresan A. Aghara S, Siriprasan I, and Gibson TA. A Study of Space Radiation Effects on Microgravity Bone Resorption, International Radiation Protection Symposium, Glasgow, UK, May 2012.

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Bytautas L (Rice University). Ab initio method development and applications: Theoretical predictions of vibrational spectrum ahead of spectroscopic measurement, Department of Physics, Texas Southern University, April 26, 2012.

Chilakamarri KB (Texas Southern University). Complex Graphs and Networks I, CREST- CRCN, Texas Southern University, October 21, 2011.

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Chinn AM and Harvey MC. Effects of Low-dose Radiation in Inhabited Environments Near Nuclear Power Plants, TSU Research Week Student Poster Presentation, April 2012.

Cohen T (UT Health Science Center). The Architecture of Insight: New Representations for Literature Based Discovery, Computer Science Department, Texas Southern University, April 25, 2012.

Cooper T (University of Houston). Replaying life's tape: Experimental Evolution of E. coli, NASA-CBER Seminar, College of Science and Technology, March 5, 2012.

Harvey MC (Texas Southern University). Study of Uncertainties in Therapeutic Absorbed Dose and Secondary Neutron Production by Nuclear Physics Model in Proton Radiotherapy using Monte Carlo Techniques, TSU Research Week, April 2012.

Hillar M (Texas Southern University). Evolution of the Messianic Expectations in the Hebrew Culture: Hebrew Bible, the Writings of the Dead Sea Scrolls, the Pseudoepigrapha, Seminar for Science, Religion Discussion Group, Christ the King Lutheran Church, Houston, November 18, 2011.

Hillar M (Texas Southern University).

From the Polish Brethren or Socinians to Liberal Religion or How the Modernity was Introduced into the Western World? Ideas Club, Humanists of Houston, August 28, 2011.

Hillar M (Texas Southern University). What Unitarian Universalists Should Know about Socinians? Emerson Unitarian Church, Houston, June 26, 2011.

Klein DJ (Texas A&M University at Galveston). Substitution-Reaction Posets, CREST- CRCN, Texas Southern University, March 2, 2011.

Malandro M (Sam Houston State University). Maximal Subgroups of Sandpile Monoids, CREST-CRCN, Texas Southern University, April 27, 2012.

Melvin LD (NASA Headquarters). A Candid Conversation with the NASA Associate Administrator of Education and Astronaut, Leland Melvin, NASA-CBER Seminar, College of Science and Technology, Texas Southern University, November 7, 2011.

Phillips S, Obot ES, Thomas R, and Wilson B. Effects of titanium dioxide carbon nanotubes on fetal osteoblast cells TSU Research Week, April 2-5, 2012. 2nd Place-student oral presentations.

Qian L (Prairie View A&M University). Achieving Robust End-to-End QoS in MANET - An Optimized Multi-layer Design, CREST- CRCN, March 28, 2012.

Richard J (Texas A&M Department of Aerospace Engineering). Summer REU Recruitment, College of Science and Technology, Texas Southern University, February 13, 2012.

Rosenzweig JA (Texas Southern University). The potential bridge between RNA metabolism and the unexpected response of the Yersinia to low shear force, NASA-CBER Seminar, College of Science and Technology, Texas Southern University, February 13, 2012.

Saydam AS (Texas Southern University). Mathematics and Education, Interdisciplinary Research Seminar, Texas Southern University, October 19, 2011.

Shishodia S (Texas Southern University). Natural Products for Prevention and Therapy of Cancer, NASA-CBER Seminar, College of Science and Technology, Texas Southern University, February 27, 2012.

Taylor J (US Air Force). TSU Partners with USAF and Test Drive Your Future for Achievement Seminar", Aviation Science Department, Texas Southern University, April 26, 2012.

Vrinceanu D (Texas Southern University). Angular Momentum Changing Transitions in Proton-Rydberg hydrogen atom collisions, implications for the study of the early Universe, Research Week, TSU, April 2012.

Watley JR and Harvey MC (Texas Southern University). A Review of Literature on African American Students Pursuing Bachelor Degrees in STEM Fields, TSU Research Week, April 2012.



Dissertation, Theses, and Workshops

Dissertations and Theses

Dissertations

Dr. Jamie Dooley-Renfro, "Diruthenium as a Potential Anticancer Agent - A Screening Study," Ph. D. Dissertation, Summer 2011, Advisor: Dr. John B. Sapp.

Dr. Terrell Gibson, "Bio-Assessment of Human Health from Chronic Metal Burden in the Urban Environment," Ph. D. Dissertation, Spring 2012, Advisor: Dr. Renard Thomas.

Adetoun Morenike Oyinola, "Advancement of Water Treatment Using Carbon Nanotubes," Ph. D. Dissertation, Spring 2012, Advisor: Dr. Bobby L. Wilson

Ralph Wayne Ross, "Models of Animal Waste in the Environment with Implications for Human Health," Ph. D. Dissertation, Spring 2012, Advisor: Dr. Oscar Criner

Theses

Nina Alaniz, "Simulated Microgravity and Caenorhabditis elegans," Fall 2011. Advisor: Dr. Fawzia Abdel-Rahman.

Nissi Abraham, "The molecular phylogeny of Ascomycota and other fungus based on the mitochondrial cytochrome-b region," Fall 2011. Advisor: Dr. Hector Miranda.

Ohunene Abogunde, "Modulation of Escherichia Coli Transcripts Levels Following Exposure to Space and Space-like Environment," Fall 2011. Advisor: Dr. Jason Rosenzweig.

Robbyn Barnett, "Effects of Microgravity on the growth Kinetics of Aspergillus nidulans," Summer 2011. Advisor: Dr. Olufisayo A. Jejelowo.

Sharline Law, "Comparative Analysis of Aspergillus Nidulans Growth Under Normal Gravity and Simulated Microgravity Using High Aspect to Ratio Vessels and Slow

Turning Vessels," Fall 2011. Advisor: Dr. Olufisayo A. Jejelowo.

Anu Mathew, "Effects of Radiation on Canchicla Albicans," Fall 2011. Advisor: Dr. Olufisayo A. Jejelowo.

Jyothi Mallepally, "Synthetic and chemical studies on platinum(II) complexes with 4-aminomethyl-benzensulfonamide," Spring 2012. Advisor: Dr. Yuanjian Deng.

Tashaineyea Merrell, "Growth Kinetics of Aspergillus Nidulans Exposed to Microgravity," Fall 2011. Advisor: Dr. Olufisayo A. Jejelowo.

Thao Nguyen, "Effects of varying levels of proton radiation levels on mouse mitochondrial genome after 24 h," Fall 2011. Advisor: Dr. Hector Miranda.

Nellen Nwaobasi, "The Effect of Simultaneous Exposure of both Microgravity and Radiation to the candida albicans yeast," Spring 2011. Advisor: Dr. Olufisayo A. Jejelowo.

Dorian Osborne, "Particle Activated DNA Damage of Calu-3 Cell Line Utilizing the Hogg1, FPG Repair Enzyme Comet Assay," Fall 2011. Advisor: Dr. Alamelu Sundaresan.

Sascha Sabaroche, "The Application of Traffic Software: Assessing Effectiveness of Bus Rapid Transit (BRT) in Addressing Congestion in a Freeway Corridor," April 2, 2012. Advisor: Dr. Carol Lewis.

Fei Tao, "Effects of Driving Behaviors on Vehicle Emissions," April 27, 2012. Advisor: Dr. Lei Yu.

Garlin Wynn, "An Assessment of Designating Minimum Path Routing from Zone A," April 15, 2012. Advisor: Dr. Carol Lewis.

Jun Wen, "Synthesis and characterization of platinum(II) complexes with sulfur- and nitrogen-containing ligands," Spring 2012. Advisor: Dr. Yuanjian Deng.

Kristal Watson, "In Vitro Effects of Synthetic Cannabinoid Mimetic on Human Lymphocytes in Modeled Microgravity," Fall 2011. Advisor:

Dr. Alamelu Sundaresan.

Samrawit Yeshitla, "Immediate Effect of Proton Radiation on Mouse Heart Mitochondria," Fall 2011. Advisor: Dr. Hector Miranda.

Min Zhang, "Evaluation of the Safety Performance of the Flashing Yellow Arrow (FYA) Signal Indication," Feb 27, 2012. Advisor: Dr. Yi Qi.

Workshops

CRCN Seminar on Logic, Complexity and the Scientific Method

The Center for Research on Complex Networks held its first intensive short course on scientific topics on Wednesday, August 8, 2012. These short courses are intended to inform students about topics that they would not normally encounter in a course. Dr. Oscar Criner held the first intensive, one day short course: An Introduction to Logic, Complexity, and The Scientific Method. In this course, Dr. Criner discussed concepts of logic, the axiomatic method and its application to science. Dr. Criner's "Notes on Elementary Logic and Logical Systems" were used to present the fundamentals of logical systems. There were 20 graduate students, undergraduates and guests in attendance for this first course. The attendees enjoyed lunch while viewing a webinar on Gödel's Proof to help them better understand the concepts that Dr. Criner had introduced. A discussion of Gödel's Proof followed. The next short course is set for October 2012.



Student Accomplishments

Shain M. Eversley, a graduate student in the Department of Transportation Studies at TSU, was offered a position as technical writer with AECOM in Mississauga, Ontario. Shain's project with AECOM, which began on January 3, 2012, is Freight Rail for the Simandou Iron Ore Project in Guinea (Africa). AECOM is a global network of planners, engineers, project managers, and technical specialist providing high quality services to public and private sector clients around the world. The New York City subway, urban development projects in the United Arab Emirates, container terminals in Hong Kong, toll-roads in Australia, and the capital improvement projects at Los Angeles International Airport are all just a small part of the award winning AECOM experience.

Sascha Sabaroche, a graduate student in the Department of Transportation Studies at Texas Southern University, received the Shirley DeLibero Scholarship Award at the America Public Transportation Foundation (APTF) Conference held in New Orleans, Louisiana, from October 1st thru the 5th, 2011. The APTF Conference is held annually, alongside the American Public Transportation Association Expo (APTA). Only the second recipient to have the honor of receiving the Shirley DeLibero Scholarship, Sascha had to meet all academic requirements, have interest in the public transportation industry as a career, as well as have a written review from an APTA member. METRO - Houston, President and Chief Executive Officer, George Greanias, sponsored Sascha for this award. Sascha states that this presentation and experience will help her in her future endeavors to become a Transportation Planner/Traffic Designer.

TSU Maritime student John Pena, was TSU's first recipient of a twelve-week internship with the U. S. Coast Guard this past summer. Pena, a senior in the Maritime Transportation Management and Security program obtained valuable hands-on training

that included learning how to fix navigation aids, visiting an air station, and learning how to do port state control work. On his first day at the internship, a U.S. Coast Guard officer asked him, "Are you ready to go airborne?" Initially caught off guard by the question, Pena knew that the only answer was "Yes, Sir . . . where do I suit up?" Prior to the internship, Pena had not considered any of the military branches as a possible career choice. The internship opened his eyes to new opportunities and he plans to apply for Officer Candidacy after graduation and looks forward to becoming a proud member of the U.S. Coast Guard.

Texas Southern University's Institute of Transportation Engineers (ITE) Student Chapter hosted a successful meeting on Nov. 3, 2011. Ms. Chelse Hoover was elected as the secretary, and will serve the ITE TSU Chapter in the coming year. Mr. Vernaldo Wright, who is a student and research assistant in the Transportation Program gave a presentation on examining the use of existing public rights-of-way for high-speed rail. ITE TSU Chapter, will organize an international meeting in March 2012. The meeting provided opportunities for ITE members to network with each other.

Ms. Peina Yuan, graduate student from Department of Transportation Studies received the Intelligent Transportation Society (ITS) Texas Scholarship during its annual meeting at San Marcus, Texas on November 11, 2011. This is the second time that a TSU student has received an award. The first was received by Huimin Xing, the ex-president of ITS TSU Student Chapter in October, 2010.

Polina Korzhova and Meijun Liu from Intelligent Transportation Society TSU Student Chapter attended the ITS Texas annual meeting on November 10-11, 2011. Ms. Korzhova presented the annual activities of ITS TSU. The Board of Directors of ITS Texas accepted the annual report and posted the report on the ITS Texas website. ITS Texas provides

financial support to ITS TSU Student Chapter to support their numerous activities.

Mr. Po-Hsien Kuo, a graduate student from Department of Transportation Studies presented the research findings entitled "Characterizing Pedestrian Performance and Intelligent Modeling of Pedestrian Related Potential Conflicts at Intersections" at the annual meeting of "The National Center for Human Performance" at Texas Medical Center on November 3-4, 2011.

Daniel Osakue, a senior student of the Computer Engineering Technology program in the Department of Engineering Technology, won a travel scholarship to attend the 2011 Society for Advancement of Chicanos and Native Americans in Science (SACNAS) National Conference from October 27-30 in San Jose, California to present research on Virtual and Remote laboratory (VR-Lab) which is sponsored by the NSF. Mr. Daniel Osakue and Mr. Osman Ahmed (Computer Science) won an award for their outstanding contribution and research presentation at the SACNAS conference. The judges were very impressed with the VR-Lab framework. Mr. Osakue and Mr. Ahmed were mentored by Dr. Xuemin Chen.

Anthony Flenoy II is a proud student-athlete in the Maritime Transportation Management and Security program at TSU. He has been awarded the Hustle Award, Tiger Award, and Dirt Bag Award by the baseball team and coaching staff. Anthony was selected as one of the first Maritime Transportation Scholarship recipients. Mr. Flenoy is most interested in the security aspect of the degree and plans to pursue a career with the U.S. Customs and Border Protection or other regulatory agency. He will obtain valuable work experience in the maritime industry by working as an Operations Assistant at the Port of Houston Authority.

COST Graduates

SUMMER 2011

BACHELOR OF SCIENCE

Biology

Sandeel Ahmed
Duranda S. Bennett
Zuri J. Dale³
Talbert L. Davis
Robin C. Dike
Onyi O. Duruji³
Marian F. Fagbemi³
Mercy A. Fultang³
Darlene E. Gardiner
Shanel Jonquil Geathers
Ann L. Glasgow
Serina Green
Kelly Y. Lee
Farah M. Mohamoud²
Henry C. Okafor
Jennifer U. Okanmelu²
Le-Hang T. Pham
Sheena L. Roberts
Latoria Scott
Jessica C. Smith

Chemistry

Desion King Hubbard
Eric Akwasi Mintah

Computer Engineering Technology

Willie James Rainwater
Elvino B. Taylor³
Frank A. Williams

Computer Science

Samuel K. Somuah¹
Sammy A. Sultan

Construction Technology

Robiatu C. Ligons
Khoi T. Nguyen
Quoc Van Nguyen³
Tien Quoc Nguyen²

Design Technology

Kenneth N. Fitzgerald
Devaughn W. Robinson

Electronics Engineering Technology

Ernie Edward Agbobock
Hiba Abdulaziz Alajeeb
Hussain Ali Aldubais³
John Terrance Bonner
Veronica Renee Johnson
Randall Rafael Organ

Mathematics

Christine Ciobhan Cyrus

MASTER OF SCIENCE

Biology

Robbyn Chavonne Barnett
Ayodeji O. Jejelowo
Anu Mercy Mathew
Nellen Chika Nwaobasi

Computer Science

Raji Kannah
Nnamdie Michael Ukpung

Mathematics

Jamel A. Ferchichi

Transportation Planning and Management

Grace Arthur
Vernon Joseph Baker
Amma B. Cobbinah
Sara Karrie Land
Yasamin Salehi
Qinyi Shi
Yubian Wang

DOCTOR OF PHILOSOPHY

Environmental Toxicology

Christina Love Clemens
Jamie LaDell Dooley-Renfro

FALL 2011

BACHELOR OF SCIENCE

Aviation Science Management

Estefanose B. Aklilu
Brandon L. Anthony
Jason Corey Barard
Jose Aly Doblado²
Eric Paxton Ecuang
DeCarla Y. Greaves³
Adrian Marquis Hopkins
Rusheal Dominique Poner
Lee Darnell Reeves
Lindsey O'Shea Robinson³

Biology

Daniel E. Akpa
Shamail R. Allen¹
Felix Anozie
Yctunde Wusamot Aycola
Latosha A. Baker

Trasruna M. Barnett
Ronishia Raquel Bradford
Bianca Vivian Brock
Tynecia N. Daniel
Kristine Marie Elliott³
Arneicia Faye Flowers³
William L. Garcia
Sam P. George
Kryscle F. Gibbs
Ann L. Glasgow
Kishon L. Haynes³
Keishon J. James
Ashley A. Johnson
John Kelley Ken³
Victoria O. Kogambi³
James Christian Marshall
Edidiong E. Morgan
Andrew Tuan Nguyen³
Tu M. Nguyen
Gold Chioma Nwokocha
Sheila Angelica Pena
Deloris Relyea
Michelle Marie Richard
Jeanne Robertson
Jeshawn S. Robinson
Floribel G. Rodriguez
Ashlei J. Ross
Jerrell E. Scott
Justin Douglas Shanks
Shaina E. Smith
Priscilla C. Tran
Maronica V. Waldrup
Renisha E. Wuey³
Brandi Amadonna Wilson

Chemistry

Chioma Juliana Agbai
Silvia Marie Anderson
Eboni Nicole Bowden
Nathaniel F. Caner
Boingoc Thi Dang
Fclica Rena Davis

Civil Engineering Technology

Fuad Ahmad Bataineh³
Rashaun Larnont Jones

Computer Science

Assaf Saleh Alawaji³
Grace W. Ndegwa
Jarvis Thomas Scott

Computer Engineering Technology

Abdullah E. Al Abdullatif³
Abdulmohsen K. Alabdullatif²
Nasser Bander Alajmi²
Salah Ali Alghamdi³
Daniel O. Osakue

Construction Technology

Darrell Wayne Glasper
Vipin Sunny Sam²
Sheldon Keron Wilkinson

Design Technology

Cyrus Brandon Holiday

Electronics Engineering Technology

Qasim M. Al Ghanem¹
Zaki M. Alhaiki
Ali Abdullah Alibrahim
Ahmed S. Alsaffar
Hassan R. Alshaer
Olanrewaju A. Dipeolu
Regil J. Koshy³
Terrence T. Lockett
Nickson S. Mlay
Baina T. Mukullasi³
Kevin C. Oderbert
Randall R. Organ

Mathematics

Vincent Gene Jones
Cecilia Jametta Kees
Jessika Ruth Parker³

MASTER OF SCIENCE

Biology

Ohunene B. Abogunde
Sharline R. Law
Tashaineyea L. Merrell
Kristal T. Watson

Computer Science

Lisa R. Bickems
Nnamdie M. Ukpung

Environmental Toxicology

Shandalyn W. Washington

Transportation Planning and Management

Grace Arthur
Christopher T. Bowling
Shain M. Eversley
Kernigan T. Lacey
Ramona S. Mose
Garlin Darnell Wynn
Huimin Xing

¹ Summa Cum Laude

² Magna Cum Laude

³ Cum Laude

SPRING 2012

BACHELOR OF SCIENCE

Aviation Science Management

Tamara Gavish
Lee Darnell Reeves
Benjamin E. Opara
William Gatson Stewart

Biology

Olivia U. Anakani
Shafqat H. Baloch
Tanisha Janae' Boston³
JokQuel L. Callis
Joshua A. Carriere
Kaylin Marie Carter
Mesha-Gaye A. Chin
Minerva Coleman-Carter
Treven O. Dickerson
Lotanna C. Egbuna
Kuntumie M. Fadika
Shari M. Galvin
Royce V. Garrett
Sam P. George
Ann L. Glasgow
Datavian D. Hawkins
Labib Hayat
Rochon Tyree James
Shavonne A. Lockridge
Julie Lois Mayes
Saadia J. Mohamed
Nicholas Antonio Moore
Fatima M. Muhammad
David Nguyen²
Gold C. Nwokocha
Olusegun A. Ogunniyi¹
Jennifer U. Okanmela²
Kelechi N. Okoro
Steven Oyetunji
Christina M. Randall
Christina Rhenea
Shephard
Mike Guru Stancill
Destinee Denea Stroud
Priscilla C. Tran
Terrence Glenn Walton
Brandi Amadonna Wilson
Zabdiel Zepeda

Chemistry

Chioma Juliana Agbai
Kristin Noelle Anderson
Silvia Marie Anderson
Miriam Chisom Anyiam
Nathaniel F. Carter
Joseph O. Fasola

Rasheedat F. Ipaye³
Tierra C. Johnson¹
Tina Simone King
Pamela Chidima Mbonu³
Chiaka C. Opara
Jasmine Simone Owens
Stephanie Desiree Suggs
David Raynard Taylor¹
Kyle Joseph Thomas³
Jasmine Michele Turner

Civil Engineering Technology

Taylor N. Bishop-Johnson
Antonio D. Dennis
Mohammad F. Elahmad
Rashaun Lamont Jones
James Sidney Mason
Bahadir Ozer

Computer Engineering Technology

Omari Kae Martin
Casey Lamar Norwood
Britnee J. Redhead

Computer Science

Ali Eissa Alhadab
Sumit Jay Dalwadi
Dakota John Laufenberg
Eric T. Slone
Quentin Paul Smith

Construction Technology

Nick Lawrence
Ricardo Lizalde
Daleon T. Lightfoot

Design Technology

Brenda Lee James
Samuel Kirven
Amber J. C. Thorne

Electronics Engineering Technology

Ahmed Atallah Alanazi
Faisal Khalaf Alanazi³
Abdullah A. Alharbi³
Faisal Saud Aljamil²
Joaquin Broussard
Samantha N. Nakyonyi²

Maritime Transportation Management And Security

Marc Tyrone Evans
John Wagner Pena
Leodegario V. Vivas²

Mathematics

Robbin Sharice Huff
Patrick Henry Jones
Ruqiah Asma Muhammad¹
Mitchell Michael Young

Physics

Addie-Malissa W. Chinn
John Patrick Metyko
Hieu T. Nguyen²
Cassandra T. Oduola
Micheal R. Smith¹
Jerald R. Watley²

MASTER OF SCIENCE

Biology

Nissi Mygodis Abraham
Nina Marie Alaniz
George Glasgow
Sedigheh Heydari
Thao Nguyen
Dorian Alexander Osborne
Katoshia M. Staves
Kristal Ta'Nae Watson
Samrawit A. Yeshitla

Chemistry

Uzoma Chidimma Echeruo
Jyothi Mallepally
Jun Wen

Computer Science

Lisa Renee' Bickems

Environmental Toxicology

Christopher Lyle Felan
Terrell Antoine Gibson
Sarah W. Munyu
Edidilong Chrys Obot

Industrial Technology

Phillip A. Gross
Gilbert Bongsiysi Sanosi

Mathematics

George Kwayyuki

Transportation Planning and Management

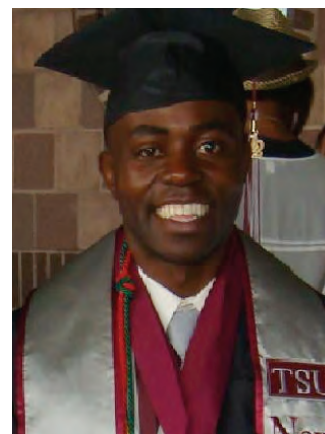
Kadidiatou Diallo
Tingting Gu
Yang He
Meijun Liu
Ramona Shonte Mose
Brandon W. Mosley
Sascha Sylene Sabaroche
Kamarah Nathifa Scott
Fei Tao
Papa Saloum Travare

Garlin Darnell Wynn
Peina Yuan
Min Zhang

DOCTOR OF PHILOSOPHY

Environmental Toxicology

Terrell Gibson
Adetoun Morenike Oyinlola
Ralph Wayne Ross



Olusegun Ogunniyi



Shain Eversley



Samuel Somuah

¹ Summa Cum Laude

² Magna Cum Laude

³ Cum Laude

Faculty and Staff

Aviation Science and Technology

Baker, Vernon, Program Coordinator
Brown, Calvin, Adjunct Instructor
Diaz, Eunike, Adjunct Instructor
Florent, Gertrude, Admin. Assistant
Glass, Charles, Associate Professor
Hall, Tasjah, Adjunct Instructor
Odetunde, Christopher, Assistant Professor
Olowokere, David, Professor and Interim Chair
Sherman, Mark, Associate Professor

Biology

Abdel-Rahman, Fawzia, Professor
Dike, Cyprian, Adjunct Professor
Fadulu, Sunday, Professor
Gardiner, Linda, Assistant Professor
Hillar, Marian, Professor
Hollomon, Mario, Visiting Asst. Prof.
Jackson, Desirée, Associate Professor
Miranda, Hector C., Assistant Professor
Olufemi, S-E, Assistant Professor
Pittman-Cockrell, Helen, Admin. Assistant
Player, Audrey, Assistant Professor
Rosenzweig, Jason, Assistant Professor
Shishodia, Shishir, Associate Professor
Sodipe, Ayodotun, Assistant Professor
Sundaresan, Alamelu, Associate Professor
Williams, Warren E., Associate Professor and Interim Chair

Chemistry

Clement, Jade Q., Associate Professor
Dang, Bachlien, Adjunct Professor
Deng, Yuanjian, Professor
Dooley-Renfro, Jamie, Adjunct Professor
Ekwere, Obot, Adjunct Professor
Fennell, Pearl M., Professor
Ford, Robert L., Professor
Johnson, Delois, Admin. Assistant
McDaniels, Vera, Program Coordinator
Mizzell, Rachel, Admin. Assistant
Saleh, Mahmoud, Professor
Sapp, John B., Professor And Chair
Valle, Bertha C., Visiting Assistant Professor
Wei, Xin, Associate Professor
Wilkerson, Daryl, Instructor
Wilson, Bobby L., Professor

Computer Science

Abdullah, Baqui, Network Administrator
Criner, Oscar H., Professor
Ghemri, Lila, Associate Professor
Handy, Maribel, Instructor
Jahed, Nadareh, Admin. Assistant
Javadian, Moshen, Associate Professor
Kamel, Khaled, Professor
Khan, M. Farrukh, Assistant Professor
Li, Wei Wayne, Professor and Interim Chair
Lin, Cheng Feng, Assistant Professor
Max, Abrar, Adjunct Instructor
Pan, Miao, Assistant Professor
Singh, Tarsem, Professor
Sleem, Aladdin, Assistant Professor
Talusani, Reddy, Visiting Instructor

Engineering Technology

Afiesimama, Boma T., Asso. Professor
Agbanobi, Raymond, Professor
Akanbi, Oladeji, Visiting Professor
Chen, Xuemin, Assistant Professor
Dilly, Ronald, Adjunct Professor
Darayan, Shahryar, Professor
Graham, Thomas, Associate Professor
Nasser, Lulueva A., Admin. Assistant
Olowokere, David, Professor and Chair
Robin-Stoute, Marcia, Project Assistant
Saneifard, Rasoul, Professor
Stewart, Carrington, Visiting Professor
Tahvilian, Hosein, Instructor
Zhang, Yuhong, Assistant Professor
Wanyan, Yaki, Adjunct Professor

Environmental Science And Technology

Balaji Bhaskar, Maruthi Sridhar, Assistant Professor
Hwang, Hyun-Min, Assistant Professor
Yakubu, Momoh A., Associate Professor
Mizzell, Rachel, Admin. Assistant

Industrial Technology

Horner, Jessie E., Associate Professor and Interim Chair
Lewis, J. Jonathan, Associate Professor
Lott, Carl B., Assistant Professor
Nasser, Lulueva A., Admin. Assistant
Osakue, Edward E., Associate Professor

Mathematics

Azzi, Elias, Adjunct Faculty
Basharat, Mahmoud, Adjunct Faculty
Bell, Della D., Professor
Chilakamarri, Kiram B., Associate Professor
Davis, Melanie, Adjunct Professor
Eakins, Nia, Administrative Assistant
Ekwo, Maurice, Visiting Professor
Evans, Joan, Instructor
Giles, Jackie, Adjunct Professor
Glenn, Nancy, Associate Professor
Holmes, Roderick, Assistant Professor
Kazakos, Demetrios, Professor
Nehs, Robert, Associate Professor
Obot, Victor, Professor
Poole, Jessica, Adjunct Professor
Saydam, A. Serpil, Associate Professor and Chair
Taylor, Willie, Professor
Williams, Joel, Adjunct Professor
Wu, Tong, Instructor

Physics

Bessis, Daniel, Professor
Florent, Gertrude, Admin. Assistant
Handy, Carlos, Chair
Harvey, Mark, Visiting Professor
Lee, Young, Adjunct Professor
Perotti, Luca, Research Professor
Tymczak, C. J., Associate Professor
Vrinceanu, Daniel, Assistant Professor
Vrinceanu, Isabela D., Adjunct Professor

Transportation Studies

Burns, Maria-Marcy, Visiting Instructor
Chen, Xiaoming, Research Asst. Professor
Davis, Betty, Research Assistant
Eakins, Paula, Administrative Assistant
Godazi, Khosro, Associate Director
Goodwin, Gwendolyn, Research Associate
Lashore, Denita, Sr. Administrative Asst.
Lewis, Carol, Professor and Chair of CTTR
Lynch, Daniel, Adjunct Professor
Mckamie, Reginald, Adjunct Instructor
Miller, Michael, Visiting Instructor
Qi, Yi, Associate Professor and Chair
Qiao, Fengxiang George, Associate Professor
Rollins, Mary, Research Assistant
Simmons, Paul, Adjunct Professor
Williams, Ursula, Program Coordinator
Yu, Lei, Professor and Dean

COLLEGE OF SCIENCE AND TECHNOLOGY ADMINISTRATION



Lei Yu
Professor and Dean

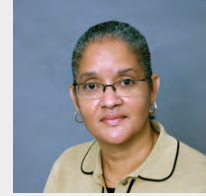
OFFICE OF THE DEAN



Oscar H. Criner
Professor and Interim
Associate Dean



Shishir Shishodia
Associate Professor and
Interim Associate Dean



Desirée A. Jackson
Associate Professor and
Assistant Dean



Charlotte Whaley
College Business Administrator III



Dolly Spencer
Sr. Administrative Assistant



Tioka Freeman
Administrative Assistant

AVIATION SCIENCE AND TECHNOLOGY

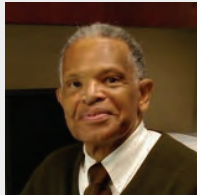


David Olowokere
Professor and Interim
Chair



Gertrude Florent
Administrative Assistant

BIOLOGY

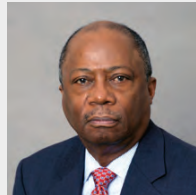


Warren E. Williams
Associate Professor and
Interim Chair



Helen P. Cockrell
Administrative Assistant

CHEMISTRY



John B. Sapp
Professor and Chair

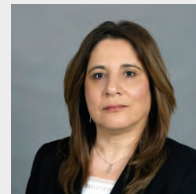


Delois S. Johnson
Administrative Assistant

COMPUTER SCIENCE



Wei Wayne Li
Professor and Interim
Chair



Nadereh Jahedmotlagh
Administrative Assistant

ENGINEERING TECHNOLOGY



David Olowokere
Professor and Chair



Lulueva A. Nasser
Administrative Assistant

ENVIRONMENTAL SC. AND TECHNOLOGY



Lei Yu
Professor and
Interim Chair



Rachel Mizzell
Administrative Assistant

INDUSTRIAL TECHNOLOGY



Jessie E. Horner
Associate Professor and
Interim Chair



Lulueva A. Nasser
Administrative Assistant

MATHEMATICS



A. Serpil Saydam
Associate Professor and
Chair



Nia Eakins
Administrative Assistant

PHYSICS

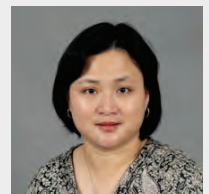


Carlos Handy
Professor and Chair



Gertrude Florent
Administrative Assistant

TRANSPORTATION STUDIES



Yi Qi
Associate Professor and
Chair



Paula Eakins
Administrative Assistant



Construction Site of the Second College of Science and Technology Building.
Expected Completion Fall 2013.

Texas Southern University Science Center



College of Science and Technology
Texas Southern University
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<http://www.cost.tsu.edu>