

Engineering Makes a World of Difference vol. 1 No. 4

"Top Prof" - Mortar Board Honor Society

Four engineering faculty were recognized by student members of the Mortar Board Honor Society as a "Top Prof" in that the selected faculty had a significant impact on their lives. The four selected faculty members are:

Dr. John Cleary, Associate Professor in Civil Engineering

Dr. Todd Lillian, Assistant Professor in Mechanical Engineering

Dr. Arka Pandit, Assistant Professor in Civil Engineering

Dr. Sally Steadman, College of Engineering







Congratulations Dr. Silas Leavesley!

The Phi Kappa Phi Honor Society recognized Chemical Engineering Professor, Dr. Silas Leavesly, with the Scholar of the Year Award. This award honors individuals who have demonstrated ideals of the Society through their activities, achievements, and scholarship. South Alabama Phi Kappa Phi

Additionally, Dr. Leavesley received the Olivia Rambo McGlothren Outstanding Scholar Award from the USA National Alumni Association for his high achievements in his research interests of developing new imaging technologies for medical sciences research and clinical applications.

Dr. Leavesley stated "I have designed new technologies to allow hyperspectral imaging to be performed on microscope and endoscope platforms for detection of pathologic cells and tissues," he noted. "Our research seeks to develop a new generation endoscope that provides images in many different colors, and it's referred to by their characteristic wavelength. My long-term goal is to have the ability to rapidly and effectively screen for cancers and other diseases."



Chevron Refinery 2019 Visit

Each Fall semester, Chevron invites our students to participate in a day long visit, touring the refinery, and learning more about the operations of Chevron, connecting with employees, and alumni. This year we had 24 students and 4 faculty/staff participate in the tour. Thank you Chevron!

Congratulations to our Tau Beta Pi Student Chapter!

Tau Beta Pi (TBP) has been named the R. C. Matthews Outstanding Chapter for 2019. They received this same award in both 2015 and 2017. Tau Beta Pi is the only engineering honor society representing the entire engineering profession. It is the nation's second-oldest honor society, founded at Lehigh University in 1885 to identify those who have conferred honor upon their Alma Mater by distinguished scholarship and exemplary character and to foster a spirit of liberal culture in engineering colleges. There are collegiate chapters at 248 US colleges and universities and a total initiated membership of approximately 600,000.

The chapter participates in K-12 projects: Jubilee Best Robotics, the Mobile Regional Science & Engineering Fair, Gulf Coast Exploreum events, and MATHCOUNTS. The chapter awards a sophomore scholarship and recognizes the Professor of the Year. Last spring the chapter conducted the inaugural Space Week with a retired astronaut and speakers from NASA. Other projects include a resume workshop with company representatives from Airbus, Alabama Power, Austal USA, Evonik, Hargrove Engineers + Constructors, and Thompson Engineering.

Five of the members were awarded national scholarships for this academic year. They are: Delane Caldwell (CE), Nick Herring (EE), Savanah Howie (CE), Alysa San Fillipo (EE), and Seth Young (CpE).



Left to right, back row: Steven Boatwright (Mechanical Engineering), TBP National Officer,
George Youssef, and Steven Klepac (Civil Engineering).

Left to right, front row: Dr. Sally Steadman, Nicholas Naylor (Civil Engineering), and Luke Beech
(Chemical Engineering).

Tau Beta Pi Professor of the Year

Congratulations Dr. Husam Omar, Associate Professor in the Civil, Coastal, and Environmental Engineering Department.

"Dr. Omar has been a faculty member at USA since 1988. After all that time you might think one might lose their drive and passion for teaching, but not so with this professor. According to his current class, he is engaging with all his students. While passionate about what he teaches, he also lightens each class with his sense of humor. The funny quips he uses in class are now a go-to response for other professors, knowing that this professor is a student favorite.



Some students have described him as having a fatherly type personality: serious and rigorous in class, but also gentle with a smile that shows he does care about every single student. I recall hearing "He can make you laugh and scared in the same sentence." Whether it's his enthusiasm in class for engineering or his sincerity for your personal progress when meeting in his office, he and his ubiquitous smile are recognized by all as a remarkable professor who wants us all to succeed.

After earning his Bachelors and Master's degrees in Civil Engineering, he received his Doctoral degree from the University of Manitoba in Winnipeg. His research interests include: Durability of R/C structures, Behavior of Structures subjected to extreme wind forces, Computer modeling of linear and non-linear structures, and Modeling of space and lunar structures."

--Nicholas Naylor, 2019-2020 TBP USA Student Chapter President



Left to Right:Dr. Christy Wheeler-West, Associate Professor (Chemical & BiomolecularEngineering Department, Dr. Carlos Montalvo, Assistant Professor (William B.Burnsed Jr, Department of Mechanical Engineering), Dr. Georgios Lazarou, Assistant Professor (Electrical & Computer Engineering Department), Dr.Henry Lester, Assistant Professor (Systems Engineering), and Dr. Saeed Latif,Assistant Professor (Electrical & Computer Engineering Department).

Faculty within the college who were recently recognized for their years of service to the university were Dr. Christy Wheeler-West for 10 years of service and Drs. Carlos Montalvo, Georgios Lazarou, Henry Lester, and Saeed Latif, for their five years of service. Thank you to our dedicated faculty for their services in teaching and research.

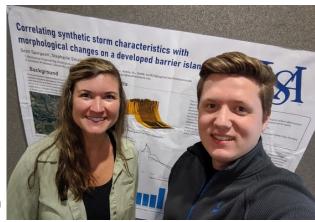


Congratulations Evan Mazur!

Evan Mazur, senior in the Civil, Coastal, and Environmental Engineering Department, received the State of Alabama American Society of Civil Engineers (ASCE) Student of the Year Award. This award came with a \$5,000 scholarship.

Phi Kappa Phi Outstanding Poster Award for the SURF Symposium

Scott Spurgeon, Senior in the William B. Burnsed Jr. Department of Mechanical Engineering, received the Outstanding Poster Award at the Summer Undergraduate Research Fellowship (SURF) Symposium. Scott's research was funded through the SURF program at USA and consisted of simulating synthetic hurricanes off the coast of Bay Head, NJ. His research continued Dr. Smallegan's (Assistant Professor in the Civil, Coastal, and



Environmental Engineering Department) research of Bay Head, using her validated grid to simulate synthetic storms on the Alabama supercomputer. The project investigated how the maximum wave height in a storm affected erosion of the beach. The project results will help continue the process of building an adaptation pathway for the area, a valuable tool that can be used by city planners and engineers to better plan for storm events, everyday erosion, and sea level rise.



USA Engineering Students Place 2nd Nationally in ASCE's Student Innovation Competition

Two USA engineering students, Rachel Chai (Civil, Coastal, & Environmental Engineering) and Bryant Baldwin (Mechanical Engineering) teamed up to showcase some ongoing undergraduate research that looks to re-use water treatment plant by-products to effect nutrient recovery.

Out of twenty teams participating in the Southeast and Carolina regions of ASCE, four teams were selected to compete in the first National ASCE Regional Student Innovation Competition in Washington, D.C. After a presentation, a poster, and a round of questions & answers, the teams finished as follows: UNC Charlotte (1st), University of South Alabama (2nd), Embry-Riddle Aeronautical University (3rd), and Georgia Tech (4th).ASCE asked university teams "to design forward-looking infrastructure ideas to transform the way civil engineers approach, design, and build infrastructure" and create a feasible business model. The USA Engineering team focused on the usage of municipal water treatment by-products for nutrient recovery, removal, and re-use. This project was only made possible with the help of South's faculty: Dr. Arka Pandit, Dr. Kevin White, Dr. Michael Chambers, and Dr. Eric Steward. Additionally, outreach to the community gave our team vital insights. This includes MAWSS, Shipshape Urban Farms, and Perdido Vineyards.

Congratulations Nicholas Mobley!

Civil Engineering major and USA football linebacker, Nicholas Mobley, earned the Cosida Academic All-District Honors. Nick is from Northern Alabama and is currently in his third year of classes. For the full article, select Ankerson and Mobley Earn Cosida Academic All-District Honors.



Congratulations Class of 2019!

On December 14th, the College of Engineering held their December commencement ceremony consisting of 41 students receiving their Bachelors of Science degrees, six receiving their Masters of Science degrees, and one student a Doctors of Science degree. We wish all the best to our graduates!

To access pictures from the ceremony, select the link: <u>Fall 2019 Commencement</u> Pictures





Order of the Engineer

Induction into the Order of the Engineer is an exciting and honorable ceremony for our most recent grads. However, the College of Engineering also inducted Dean of the College of Engineering, Dr. John Usher and University Trustee, Electrical Engineering USA Alum, class of 1990, William Ronald Graham, into the Order this year. We were honored they were able to participate and receive this recognition.

We invite other engineers with ABET accredited degrees, including but not limited to South Alabama alums, to join us for a future induction ceremony. Please contact Mrs. Ronda Girardeau at rgirardeau@southalabama.edu indicating your interest and we will make sure you are included and receive the Engineer's Ring.





Dr. John Usher

William R. Graham

Thank you AM/NS Calvert!

AM/NS Calvert has pledged their support to the College of Engineering's outreach efforts in 2020. AM/NS Calvert will serve as a Gold Level partner for the annual Mobile Regional Science and Engineering Fair (March 2020) and presenting partner for the College's Summer Engineering Academycamp (S.E.A) to be held Summer 2020. Additionally, they are the presenting partner to our annual Welcome to the Jungle (W2TJ), our student organization fall semester kick-off event. Funding will be utilized to welcome nearly 600 K-12 students to Shelby Hall through several college hosted open house events in 2020. AM/NS Calvert has also committed funds to support the USA chapters of the National Society of Black Engineers (NSBE) and the Society of Women Engineers (SWE).

Representatives from AM/NS Calvert visited with Dr. John Usher on December 11 and discussed upcoming partnership opportunities made possible through AM/NS Calvert's generous pledge of support.



Left to Right: Dr. John Usher (Dean of the College of Engineering), Brooke Dolbare (Communications Area Manager), Meredith Heath (Recruiting Team Manager), Danielle Pendleton (Workforce Development Recruiter), Jason Stringer (Emergency Response Area Manager), Kevin O'Daniel (Emergency Response Team Manager), and Jed Fulford (Emergency Response Team Manager)

IEEE Southeastcon coming to a campus near you in 2022!

USA's College of Engineering Electrical & Computer Engineering Department has been chosen to host the 2022 IEEE Southeast Conference. We are excited for the opportunity to host this phenomenal conference. For more information, visit their website at IEEE Region 3 SoutheastCon.

SoutheastCon is the annual IEEE Region 3 Technical, Professional, and Student Conference. It brings together Computer Scientists, Electrical, and Computer Engineering professionals, faculty and students to share the latest information through technical sessions, tutorials, and exhibits. It is the most influential conference in Region 3 for promoting awareness of the technical contributions made by our profession to the advancement of engineering science and to the community. IEEE Region 3 is one of the 10 regions of IEEE global membership, and encompasses the southeastern United States including the states of Alabama, Florida, Georgia, areas of Indiana, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and the country of Jamaica.

Save-the-Dates 2020!

Feb. 14, 2020 Giving Day:

Save the date for USA's annual Day of Giving. For 24 hours, we are calling on all Jags to give back and make a real, immediate impact for our College of Engineering. Your gift, of any amount meaningful to you, helps keep a USA Engineering degree accessible and exceptional for future generations of South Engineers.



April 17, 2020: The 14th Annual College of Engineering Alumni Society Golf Tournament The tournament will be held at the Robert Trent Jones Golf Trail at Magnolia Groves. More information on how to participate can be found at Engineering Alumni Golf Tournament 2020.

September 24-27, 2020: Alumni Reunion 2020: The University of South Alabama will host our first Alumni Reunion weekend September 24-27, 2020. We hope you will join us! To learn more, please visit Alumni Reunion 2020.

Make an Impact Before December 31

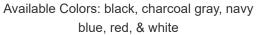
We hope you'll consider making a gift this holiday season to the College of Engineering. Each dollar makes a difference in the lives of our college. Your gift, of any amount, will go to work to support our students, life changing research, and our faculty. Make a gift online by visiting giving.southalabama.edu. If you have questions about what option is best for you, please contact William Holley at wholley@southalabama.edu

College of Engineering Alumni Polos

College of Engineering Alumni polos will be for sale starting this Spring! If you're interested in ordering a polo, orders can be made starting in the new year. We will place the first order of polos at the end of January 2020. Proceeds from sales will go towards the College of Engineering Alumni Society Scholarship. The polos are priced at \$39.50 (includes shipping/handling).

Polos are a performance material and are offered in men's and women's sizes and in the following colors: navy blue, black, white, red, charcoal gray. An example is below of a red polo and the USA alumni approved logo.







ALUMNI SOCIETY

USA Alumni Approved logo

For any questions, please contact Nani Perez Uribe at nperezuribe@southalabama.edu