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Electrical Resistivity Survey for Subsurface Exploration Experiment Setup

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The Louisiana Section of the American Society of Civil Engineers was founded in 1914 and has since been in continuous operation. The Section consists of the entire state of Louisiana and is divided into four branches that directly serve over 2000 members. They are the Acadiana Branch centered in Lafayette, the Baton Rouge Branch, the New Orleans Branch, and the Shreveport Branch.

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The Louisiana Section is located in ASCE Region 5 that consists of the Louisiana, Mississippi, Alabama, Georgia, Florida, and Puerto Rico Sections.

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Jim Costigan, El

President's Message By Beau Tate, PE

Happy New Year and welcome to 2020. Now that the Holidays have past, we can focus on the new year and ASCE. There are several exciting events coming up in the beginning of this year. The 2020 Multi Regional Leadership Conferences have officially kicked off, Engineers week 2020 is set for February 16-22, 2020, and the 24th Joint Engineering Societies Conference will be help on January 29-30, 2020. Please take advantage of these events to meet with your fellow engineers, and hopefully develop new relationships.

I recently had the honor to participate with fellow colleagues in judging the 21st Annual Excellence in Concrete Awards Competition for the American Concrete Institute (ACI), Louisiana Chapter. Judges included myself; Rebecca Chopin-La ACI President; Jonathan Kernion – La Exec VP of Associated General Contractor (AGC); and, Jessica Walker - President New Orleans American Institute of Architects, which comprised a good mixture of engineers, contractors, and architects. Categories for projects to be judged included Low Rise Buildings, Infrastructure, Repair & Restoration, Flatwork, and Decorative Concrete. Projects in each category were awarded based on the following criteria: Award of Excellence, Merit, or no award at all. For more information, please visit the following link <u>https://acilouisiana.org/Awards</u> to view all the award recipients. There were some very interesting projects submitted.

The LA ASCE Section is currently coordinating with two additional organizations and assisting them in becoming official subsidiary organizations in Louisiana. They are Utility Engineering & Surveying Institute Chapter (UESI) and the Environmental & Water Resources Institute (EWRI). The section is currently working with both organizations to prepare bylaws, which will be adopted at the upcoming board meetings.

ASCE Society has officially kicked off the 2020 Section member drive as part of the Member-Get-a-Member (MAGM) program. ASCE Sections will be competing to refer the most new ASCE members in 2020. Each section can track their progress and monitor your current ranking. ASCE Society also provides referral resources to help sections become successful in referral efforts. So, branches, please feel free to contact me at your convenience for the email and links to assist with this important effort.

Lastly, please be aware of the upcoming ASCE Spring Conference to be held in Lafayette, LA on April 23-24. The link for all information including registration is <u>http://branches.asce.org/acadiana/2020-</u> <u>asce-spring-conference</u>. Finally, I would like to congratulate all of Louisiana for our National Football Championship Win.

Geaux Tigers!



Beau Tate, PE

DREAM BIG: CHANGING THE CONVERSATION ABOUT ENGINEERING

In partnership with MacGillivray Freeman Films, and presented by the, Bechtel Corporation., ASCE is proud to present *Dream Big: Engineering Our World*.



Combined with educational programming and powerful media, Dream Big:

- Informs the public about the important work engineers do, helping to heighten interest and change perceptions about the profession
- Inspires young people to consider careers in engineering
- Answers the demand for K-12 engineering education resources, in alignment with the Next Generation Science Standards
- Dream Big is playing in museums and science centers around the world. See the film in your area or view on Netflix!

Electrical Resistivity Survey for Subsurface Exploration

By Casey Tsai, MSCE, Ching Tsai, PhD, PE and Md Nafiul Haque, PhD, EIT

Geotechnical Exploration

Geotechnical exploration provides the essential subsurface information for the design and construction of any structural support system. It identifies soil conditions in the area of concern and provides geotechnical engineers the basis for geotechnical evaluations.

The conventional geotechnical exploration method is to take soil samples with a drill rig at discrete locations and depths and test the samples in the laboratory to determine soil properties such as strength, plasticity, compressibility, and hydraulic conductivity depending upon the project requirements. The greatest advantage of this method is the engineer has the opportunity to physically exam the samples. On the other hand, the sampling and handling also cause disturbance that can potentially affect the test results.

To remedy the disturbance of sampling and testing, other in-situ methods are sometimes used such as electrical cone penetrometer testing (ECPT), dynamic cone penetrometer testing (DCP), vane shear testing (VST), pumping tests and many other less popular tests such as pressuremeter tests, or dilatometer tests.

Disadvantages of Conventional Site Exploration Techniques

All methods described above require the insertion of a sampler or instrumented testing device and the sampling and testing a small amount of material that the geotechnical engineers rely on to design the foundation support systems. The conventional methods suffer from the long field and laboratory time needed to acquire the sample and testing. For small projects, the time for the field and laboratory testing work can take weeks to complete. For large projects, they can take months even years to complete. Site access can be an issue due to large equipment required for sampling and/ or field testing. In case of access to areas that are subjected to regulatory permitting requirements such as navigable waterways, coastal zones, adjacent to the federal levee systems, the time it takes to obtain permits can be days or even weeks. Cost is another issue, due to time and special equipment needed to perform such work, the cost of the field and laboratory testing can easily exceed 70% to 80% of the geotechnical engineering fees that leave only a small percentage of the fees to the most important task – engineering.

Finally, the conventional exploration methods use of only a few discrete investigation points and depths to represent the entire project site inherently carry some risks from the inference with small tested volumes. The Federal Highway Administration (FHWA) shows that a typical geotechnical investigation only tests less than 0.01% of soil volume for most projects in the presentation that promotes Advanced Geotechnical Methods in Exploration (A-GaME). With such a small volume of soils tested, the risks that the engineers and stake holders take can be significant. The safety of the public that use the completed project cannot always be assured.

Electrical Resistivity

As a part of the A-GaME promotion, Electrical Resistivity Imaging (often called Resistivity Imaging), a geophysical method, is one of the examples provided in FHWA's presentation. This method is also gaining notable recognition from the engineering and construction community globally for site investigation. Electrical resistivity is a nondestructive, fast and cost-effective method of site investigation and soil characterization. Advantages of Electrical resistivity over conventional methods include: (1) a continuous image of subsurface conditions, (2) coverage of a large



Casey Tsai, MSCE



Md Nafiul Haque, PhD, EIT

area within a short time, (3) low cost, (4) observations of site heterogeneity and zones of high moisture content, (5) quick and easy data processing, and (6) not operator dependent. Because of these benefits, the use of ER has increased significantly in recent years. It is one of the most convenient techniques for preliminary subsurface exploration in geotechnical and geo-environmental applications.

The minerals that constitute clay soils are thin sheets of layered aluminum, silica, sodium or potassium ions which have high surface charges while sands generally consist of mostly inert silica. As such, the clay soils are relatively conductive to electricity (lower electrical resistance). In contrast, the sandy soils are less conductive (higher electrical resistance). The principle of ER imaging is to use the contrast in the electrical resistivities among various geomaterials to identify soil types. The conductance of electricity depends not only on the solid phase, but also on the liquid phase. Other factors affecting ER include soil fabric (soil particle arrangement), organic contents, inclusions, moisture contents, temperature, and pore water chemistry. Interpretation of the results require knowledge of all above factors, not simply the material types.

Typical resistivities for various soil types and water are tabulated below. It should be noted that these numbers can only serve as guidelines. Other factors including moisture contents, soil fabric, and pore water chemistry are not included. Ground truthing with sampling and testing to confirm the resistivity values are essential especially when the soils are influenced by salinity of pore water in south Louisiana.

Soil Type	Electrical Resistivity (ohm-m)
Well Graded Gravel	600 - 1000
Poorly Graded Gravel	1000 – 2500
Clay Gravel	200 - 400
Silty Sand	100 -800
Clayey Sand	50 – 200
Low Plasticity Silty/Clayey Sand	30 - 80
Fine Sandy Soils	80 - 300
High Plasticity Inorganic Clays	10 – 55
Surficial Soils	1 -50
Clay	2 - 100
Sandy Clay	100 – 150
Pore Water	
Pure Water	18200
Sea Water	0.2

Table 1: Typical Values of Electrical Resistivity

Test Methods

Typically, ER is measured using 4 electrodes inserted into ground at various spacings. Electrical current (i) is directly injected into the ground using two of the electrodes. The ground resistivity (R) is then measured directly as a potential difference (V) between potential electrodes. The average resistivity is then calculated as where G is the geometric factor depending upon the arrangement of electrodes. There are many electrode arrangement methods. Some of the electrode array configurations are shown in Figure 1. The most commonly used arrangement is the Wenner array in which the electrodes are spaced equally. The current is injected from the outer electrodes and the potential difference is measured using the two inner electrodes. Some of the ER methods can be enhanced with induced polarization (IP) by switching on and off the current and observe the voltage response as a function of time.

Case History

This project is located just east of Shreveport, Louisiana. The site location is presented in Figure 2. An existing 25- to 30-foothigh embankment had been in-place for 30+ years.. The Point Bar deposits are mostly alternating layers of silt and clay soils. The near surface Point Bar soils are generally highly desiccated. The strengths of these soils depend on the degree of desiccation. The Substratum sands typically contain less than 10% fines and occasionally contain trace amounts of gravel near the bottom of the stratum. Abandoned Channels and Courses cut through the Point Bar and Substrata deposits to various depths. The soils within the Abandoned Channel and Courses are highly variable. Due to the variability of these deposits, it is likely that foundations placed in the Abandoned Channel deposits may have to be larger and deeper than otherwise placed in the Point Bar/Substratum deposits.

To aid the geotechnical design and to better define the boundary of the Abandoned Channel deposits, ER Imaging was used to guide the soil boring program. A SuperSting R8 meter was used. It

includes computerized multi-channel, multiplexing hardware and software, and 56 "smart electrode" probes that can act alternatively as current or potential electrodes. The dipole-to-dipole strong gradient array with an electrode spacing of 10 feet was used. This arrangement resulted in an effective depth of the survey of 50 to 60 feet. A dipole-dipole strong gradient array consists of a pair of current electrodes as well as a pair of potential electrodes. The pairs of electrodes are close enough together that they are viewed as one electrode, rather than 2, thus forming a single electric field rather than a field with 2 different electric poles. The primary advantage of the dipole-dipole array is its high resolution. However, depth can be limited if the electrodes are too far apart. The strong gradient array is an array created for the automatic multi-channel systems which is used for complete data coverage and has higher signal levels which can help compensate for data filtered out from the dipole-dipole array due to noise.

Survey Transects

Two survey lines at the approximate locations shown in Figure 2a: one each in the approximately south-north (Figure 2b) and westeast (Figure 2c) directions. These survey lines were joined together with two co-linear survey transects each. The field ER work was conducted in 3 days by one technician which including traveling which took about 5 hours one way. Preliminary soil borings were used as ground truthing points. They were drilled away from the ER survey lines. Some of the nearby borings were projected to and overlaid onto the ER profiles. Due to the projection and elevation differences, the strata boundaries may not match perfectly with ER profiles. It should be noted that while the entire cross sections are shown, the quality near the starting and ending points of survey transects is not as good as the center portion of the survey transects. In addition, due to the electrode spacing used in the survey, the maximum resolution for the profiles is about 5 feet. The N-S profile clearly showed some 25 to 30 feet of embankment fill overlying the Point Bar deposits which was found to be at about the 60-foot depth. The depth to the separation between the Point Bar soils and Substratum Sands was not clearly identifiable due to the effective depth of the method used in the data collection. The E-W survey was performed on the natural grade. No fill was found. At the mid-point of the profile, it clearly showed marked difference in soil conditions. The west half showed high resistivities, an indication of sandy soils of the Substratum Sands. The east half showed lower and variable resistivities that are within the ranges of clay and silt soils, most likely from the Abandoned Channel deposits.

Conclusions

The case history clearly shows the benefit of using ER to identify site variability. To investigate the same survey lines using the conventional exploration methods with a 3-man crew and sampling at the 100 feet to 200 feet intervals, it can take several weeks to complete the field work and a couple more weeks of laboratory testing. The ER imaging that shows a continuous profile is another benefit of ER imaging. It should be noted that ER cannot provide many geotechnical parameters such as strength and compressibility. Some conventional exploration borings are still needed. The best use of ER is to identify the potential issues in the preliminary investigation. The conventional investigation can follow by selecting exploration points strategically located to confirm the findings of ER imaging. Significant savings and risk reduction can be made when a careful site specific investigation using the combination of ER imaging and conventional geotechnical exploration. It should be noted that not all sites are suitable for using ER. Overhead power lines, underground utilities and many other factors can affect the survey results. Even though these problems can be overcome by performing the ER survey perpendicular to the utility lines, the geotechnical engineer should identify potential limitations before implementing ER imaging.





Figure 2a: Approximate ER Transect Lines



Figure 2b: N-S Profile



Figure 2b: E-W

References:

- 1. FHWA, EDC-05 Advanced Methods in Geotechnical Exploration Presentation
- 2. Hossain, S; Kibria, G and Khan, S. "Site Investigation using Resistivity Imaging" 1st Edition
- 3. Liu, C and Evett, J, S. "Soils and Foundations" 4th Edition.

Ching Tsai, PhD, PE, is the Principle Engineer for Ardaman and Associates at Baton Rouge, Louisiana. He received his Ph.D. from LSU and has 40 years of engineering experiences. He has been a consulting geotechnical engineer for over 30 years working on projects from the great lake region to the Gulf coast.

Casey Tsai, MSCE, is the Assistant Project Engineer at Ardaman and Associates. She graduated from LSU. She is in charge of the geophysical testing using electrical resistivity imaging.

Nafi Haque, PhD, EI, is the Assistant Project Engineer at Ardaman Baton Rouge branch. He graduated from LSU. His primary interest is in the deep foundation design. He has published over 20 technical papers most of them are in major technical journals.

2019 Region 5 Wall of Fame – Norma Jean Mattei, PhD, PE, F.SEI, F.ASCE



Norma Jean Mattei, PhD, PE, F.SEI, F.ASCE

Norma Jean Mattei, Ph.D., P.E. is professor and past chair at the University of New Orleans' (UNO) Department of Civil and Environmental Engineering. She has been active in ASCE for more than 20 years in local, regional and national leadership roles and was elected by the Society's membership as the 2017 ASCE President.

President Mattei sits on the executive committee of ASCE's New Orleans Branch SEI/Structures Committee.

The former Region 5 director has served on ASCE's Committee on Diversity and Women in Civil Engineering and the Committee on Licensure and Ethics. ASCE has drawn on her expertise for a number of media relations activities, including an interview with National Public Radio's "Morning Edition" on post-Hurricane Katrina conditions. Recently, she was spokeswoman for "Raised Floor Living," a commercial that aired in the New Orleans' region promoting elevation of residential structures above the flood plain. In 2012, President Obama named Mattei one of three civilian members of the Mississippi River Commission, which researches and policy provides and work recommendations covering flood control, navigation and environmental projects. In that capacity, she helped oversee a drainage basin that covers 41 percent of



Peter M. Moore, PE, ENV SP, F. ASCE

the nation. The governor of Louisiana appointed her to the state's licensing board for professional engineers -- LAPELS. She also serves on the board of directors for both the Louisiana Transportation Research Center Foundation and the Louisiana Technology Council.

Mattei has been a member of the UNO faculty since 1995. Her technical research interests include large watershed management, material and structural testing, sustainable reuse of spent construction and fabrication materials, and residual stress measurement. She is also interested in diversity, licensure and ethics issues.

Mattei earned a bachelor's degree in civil engineering in 1982 and a doctorate in 1994, both from Tulane University.

2020 Region 5 Awards Criteria SUBMITTAL DEADLINE: JUNE 1, 2020

Region 5 is continuing a Region 5 Awards program in 2020. The below categories are open for nomination:

- 1. **Region 5 Civil Engineer of the Year** awarded annually to one recipient to recognize outstanding achievements of a practicing Civil Engineer that is active within the Region.
- 2. **Region 5 Younger Civil Engineer of the Year** awarded annually to one recipient to recognize outstanding achievements of a practicing Civil Engineer, age 35 of less that is active within the Region.
- 3. **Region 5 Civil Engineering Student of the Year** is awarded annually to one recipient to recognize an outstanding Civil Engineering or Civil Engineering Technology Student, enrolled in an undergraduate program and is active in ASCE within the Region.
- 4. **Region 5 Wall of Fame** a designation to honor Civil Engineers that have made a substantial contribution to ASCE, Region 5, and the Civil Engineering community. Nominations will be considered annually, with no more than 3 candidates selected for the honor in a given year.

Eligibility of the Award

Nominees must be submitted by a Region 5 Section. Only 1 nomination per Section, per award, may be submitted each year. The selection process is based on the nominees contributions to the region, society, profession, the public welfare, and/or humankind as listed under the purpose of the award.

Qualifications

- 1. Nominee for Civil Engineer of the Year must be a licensed Professional Engineer and must be an ASCE Member in good standing.
- 2. Nominee for Younger Civil Engineer of the Year must be an ASCE Member or Associate Member and must be an ASCE member in good standing.
- 3. Nominee for Engineering Student of the Year must be an ASCE Student Member in good standing enrolled in an undergraduate Civil Engineering Student.
- 4. Nominee for the Region 5 Wall of Fame must be a Fellow or Life Member of ASCE at least 55 years or older, made significant contributions to the Civil Engineering Profession, supported and promoted ASCE, Region 5, and the Civil Engineering Profession, and be endorsed by two Licensed Professional Engineers not on the Board of Directors of the nominating branch.

Nomination Criteria

The following sections present the award nomination criteria that will be considered. The information can be typed and submitted as attachments to this form, or the information can be entered electronically, lengthening the form as needed. Nomination should be a maximum of 5 pages. Points may be deducted if longer than 5 pages.

- 1. <u>ASCE Involvement</u>: ASCE activities during the past five years, including offices held and awards (20 Points).
- Professional/Technical Society Involvement: Other professional/ technical society activities during the past five years, including offices held and awards (20 Points).
- 3. <u>Civic and Humanitarian Organization Involvement:</u> Civic and humanitarian organization activities in during the past five years, including positions held (20 Points).
- 4. <u>Engineering Achievements</u>: Submit narrative supporting nominee's project achievements (40 Points).

Additional Requirements

1. A statement of 100 words maximum (one page, double spaced) that supports the nomination showing achievement in Civil Engineering. Statement will include description of awards received in recognition of Civil Engineering accomplishments. *NOTE: The statements of the nominees selected for the Civil Engineer of the*

Year Awards will be used in Region Award announcements and on the Region webpage.

- 2. A nomination letter signed by the sponsor Section. (not included in total page count).
- 3. A resume would be helpful to the judges but is not obligatory (not included in total page count).
- 4. A photograph will be required from the winning nominees.
- 5. Name and address of a local newspaper.

Submittal Requirements

Submittal Deadline: JUNE 1, 2020 Send the completed form to the following address: alimm@bellsouth.net Click to download the 2020 Awards Nomination Form (.doc)

Award Presentation

Award winners will be contacted by **October 1, 2020.** Awards will be presented at a local Section or Branch function

Questions

For questions, please contact Ali Mustapha at alimm@bellsouth.net

PUBLIC NOTICE OF VACANCIES

Southeast Louisiana Flood Protection Authority-West Board of Commissioners

Pursuant to La. R.S. 38:330.1 *et seq.*, notice is hereby given that applications are being accepted from persons interested in serving on the Board of Commissioners for the Southeast Louisiana Flood Protection Authority-West ("SLFPA-W"). Seven members serve on the Board of Commissioners. A Nominating Committee comprised of representatives of civic, professional and academic organizations reviews applications and recommends individuals for appointment by the Governor and confirmation by the Senate. The Nominating Committee is comprised of representatives from the following organizations: Public Affairs Research Council of Louisiana, Council for a Better Louisiana, Louisiana Geological Survey, Association of State Floodplain Managers, National Society of Black Engineers, UNO College of Engineering, Tulane University School of Science & Engineering, Southern University College of Engineering, LSU College of Engineering, Louisiana Engineering Society, American Society of Civil Engineers, West Bank Business and Industry Association, and Our Lady of Holy Cross College.

RESIDENCY & QUALIFICATIONS

Residency

Two members shall reside in Jefferson Parish on the west side of the Mississippi River within the jurisdiction of SLFPA-W. Two members shall reside in Orleans Parish on the west side of the Mississippi River. Three members shall reside outside of Jefferson or Orleans Parishes.

Qualifications

Engineering/Related Field Professional

Three members shall be either an engineer or a professional in a related field such as geotechnical, hydrological, or environmental science. At least one of the three members shall be a civil engineer.

Non-Engineering Professional

Three members shall be professionals in disciplines other than engineering, geotechnical, hydrological, or environmental science. They each shall, at a minimum, hold a baccalaureate degree from an accredited institution of higher learning with at least ten years of professional experience in that discipline.

Engineering/Related Field Professional or Non-Engineering Professional

One member shall possess the qualifications of either an engineering/related field professional or of a non-engineering professional.

The Nominating Committee is accepting applications for one position on the SLFPA-W Board of Commissioners due to an unexpected vacancy: 1. A resident of Orleans West to complete a term from July 01, 2019 to July 01, 2023.

Once the new member is appointed, the composition of the Board must meet the residency and occupational qualifications defined above.

Interested parties may obtain an application by contacting Stephanie Stout, Office of the Governor – Coastal Activities, 1051 North Third Street, Suite 138, Baton Rouge, LA 70802; (225)342-3968 office; (225)342-5214 facsimile; stephanie.stout@la.gov e-mail, or by following this link:

http://coastal.la.gov/southeast-louisiana-flood-protection-authorities/ The deadline for receiving applications is March 20, 2020.

ASCE-COPRI Louisiana Chapter News

By Victoria Curto, PE, Director - Communications



The Louisiana Chapter of the American Society of Civil Engineers (ASCE) Coasts, Oceans, Ports, and Rivers Institute (L.COPRI) is continuing to promote membership and professional development throughout the State of Louisiana by conducting seminars and providing scholarship opportunities to Louisiana students.

L.COPRI Fall Seminar 2019 and L.COPRI Scholarship 2019

L.COPRI held their fall seminar on November 14, 2019 at the Lod Cook Conference Center in Baton Rouge with approximately 60 attendees from different sectors including consultants, government agencies, and academia. Speakers and panelists addressed the recent Mississippi River and Tributaries flooding that occurred in 2018 and ASCE 2019 and how it impacted various ports, navigation, management of the Lower Mississippi River, and Gulf of Mexico Hypoxic Zones. Speakers and panelists from the academia, public sector, and private sector included Tim Osborn, Sean Duffy, John Lopez, Bren Haase, Moby Solangi, Joe Spraggins, Clint Willson, Tyler Comeaux, Brian Cox, Jacob Crist, Randall Withers, Nancy Rabalais, and Norma Jean Mattei.

The Louisiana COPRI chapter has an active student member group. To encourage students in Louisiana, the executive committee awarded two scholarships of \$1,000 each: one for an undergraduate student and second one for a graduate student. This years winners were Blade Leger, civil engineering undergraduate student at University of Louisiana at Lafayette and Felix Santiago-Collazo, a PhD student at Louisiana State University focusing the compound flood produced by rainfall-runoff and storm surge during a hurricane event in coastal watersheds.



New and Upcoming events

L.COPRI is pleased to welcome a new board member: M.R. Hasan. Hasan is a structural engineer and will fill the Young Member Board Position.

Later this month, L.COPRI board members Dennis Lambert, Tyler Ortego, and Myriam Bou-Mekhayel will attend the COPRI Leadership Summit in Reston, Virginia. Our board members will share the L.COPRI major accomplished last year and what is planned for the coming year, which include the L.COPRI Fall Seminar 2019 and awarding the L.COPRI Scholarship 2019 to two deserving students.

For activities planned in the coming year, L.COPRI will resume the quarterly seminars focusing on core competencies of L.COPRI. The first seminar of 2020 is expected to take place in the Spring with an emphasis on the Port of New Orleans Master Plan, with a potential boat tour for a limited number of guests.

Other Information

The activities of L.COPRI will include seminars, workshops and other activities to benefit all ASCE and COPRI members. One does not have to be an Engineer to join COPRI. These Institutes are formed for the benefit of ASCE and non-ASCE members to participate and interact with other professionals interested in coastal, oceans, ports, and riverine efforts in Louisiana. If you have any questions or to add your name to our mailing list, please contact Victoria Curto, at LCOPRI@yahoo.com.



ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS

REGISTRATION FORM

2020 ASCE Louisiana Section Spring Conference

April 23 - 24, 2020

City Club at River Ranch, 1100 Camellia Blvd #202, Lafayette, LA 70508

Part 1. Registrant Information (*Re	quired)					
a. First Name*		b. Last Name*				
c. First Name as to Appear on Name Tag*		d. Class	P.E	P.L.S.	Ph.D.	E.I.
e. ASCE Member Number* (If Applicable)	I					
f. Company Name						
g. Street	h. City	i. State		j. Zip		
k. Telephone*	l. Email*	I				
Part 2. Individual Registration (Che	ck all that apply)					
Registration includes breakfast, lunch, all technical sessions and events on s	and admission to specified day(s).	Postmarked BEFORE Marc	ON or h 15, 2020	Postm	arked AFTER 15, 2020	R March
STUDENT TWO-DAY/FULL REC	GISTRATION:					
ASCE Student Member / Non-Member		\$20			\$40	
TWO-DAY/FULL REGISTRATION:						
ASCE Member (Indicate member number in Part 1)		\$250			\$300	
Non-Member		\$300			\$350	
THURSDAY REGISTRATION (Ne	tworking Event):					
ASCE Member (Indicate member number in Part 1)		\$175			\$225	
Non-Member		\$200			\$250	
FRIDAY REGISTRATI	ON:					
ASCE Member (Indicate member number in Part 1)		\$125			\$175	
Non-Member		\$150			\$200	
	Total :					

Please make checks payable to:

ASCE Acadiana Branch

Mail form with payment to:

ASCE Spring Conference P.O. Box 60805 Lafayette, LA, 70596 For questions concerning the conference, contact: asceacadiana@outlook.com

ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS

GENERAL CONFERENCE SPONSOR & EXHIBITOR FORM

2020 ASCE Louisiana Section Spring Conference April 23 – 24, 2020 City Club at River Ranch, 1100 Camellia Blvd #202, Lafayette, LA 70508

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Past ASCE Louisiana Section Presidents

By Tonja Koob Marking, PhD, PE

Past ASCE Louisiana Section Presidents

In August 2019, the LA Civil Engineer journal presented the Past Presidents of our section from 2002-2019 with their pictures. We inquired of the ASCE Society for a list of all the Past Presidents and their photographs. Although, we could not locate the pictures, we would like to honor their service to the society and profession.

U.S. ARMY CORPS of ENGINEERS;

Hydraulics Expert Dies at 74 in New

Orleans--Professor Emeritus of Tulane.

March 13, 1871 Penn Yan NY/USA -January 29, 1945 New Orleans, LA/USA

William Benjamin Gregory graduated

from the Penn Yan Academy in 1890,

obtaining the ME degree from Cornell

University, Ithaca NY, in 1894, and made

post-graduate works there in 1907. He

was an instructor from 1894 to 1897,

The Times Picayune. Jan. 31, 1945

ASCE Louisiana Section's First President



COL. W.B. GREGORY

assistant and associate professor of experimental engineering until 1905, from when he took over as professor and dean of the Engineering Department until 1938, of the Tulane University, New

Orleans, LA. From 1902. he also served the US Department of Agriculture USDA as irrigation engineer. He further was consultant of the Mississippi River Commission from 1903 mainly testing hydraulic dredges. From 1928 to 1929 he was a consultant to the US Army Corps of Engineers, conducting



Tonja Koob Marking, PhD, PE

hydraulic tests for the Bonnet Carré Spillway, Lower Mississippi Valley. Gregory was the president of the New Orleans Academy of Sciences in 1914. He was a member of the American Society of Civil Engineers ASCE, Council Member from 1916 to 1919, and vice-president in the term 1920-21. He was president of the ASCE Louisiana Section, newly formed in 1914, from 1917 to 1918. W.B. Gregory was proceeded in death by his daughter Elizabeth Gregory Ferriss [1898 –1942]. He was survived by his wife of 47 years [m. 1898–1945], Selina Elizabeth Brès Gregory of Newcomb College of New Orleans, LA [1870-1953]; son William Brès Gregory [1901-1984]; and, daughter Angela Brès Gregory of Newcomb College of New Orleans, LA [1903-1990].

Rudalah Simanaguy III 2010	William Curun 1002	Joseph T. Montgomery III 1065	William H. Bhadas 1028
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Matthew Daniel Redman 2017	John W. Moore1990	Roy G. Cappel1963	F.P. Hamilton1936
Christopher G. Humphreys 2016	James C. Webb1989	Roy G. Cappel1962	John H. O'Neill1935
Pamela G. Granger2015	Frank M. Stuart1988	Francis D. Sessums1961	John Riess1934
Robert W. Jacobsen2014	Michael V. Aderman1987	Frank C. Fromherz1960	George P. Rice1933
Kurt M. Nixon2013	James C. Porter1986	Bernard A. Grehan1959	Clarence N. Bott1932
Ronald L. Schumann, Jr2012	Leonce P. Waguespack, Jr 1985	Calvin T. Watts1958	E.S. Lanphier1931
Patrick J. Landry2011	Lloyd A. Held, Jr1984	Dean Lee H. Johnson, Sr1957	C.M. Kerr
Christopher P. Knotts	Bobby E. Price1983	Roy T. Sessums 1956	B.H. Grahan1929
Ali M. Mustapha2009	Thomas L. Jackson1982	Louis M. Buja1955	F.A. Muth1928
Eugene R. Desormeaux	Charles W. Hair, Jr	Louis M. Buja1954	W.T. Hogg1927
Timothy M. Ruppert	Larry A. McKee1980	Prof. Frank W. Macdonald1953	E.S. Bres1926
Kim E. Garlington2006	Philip J. Lindsay1979	E.M. Freeman1952	Samuel M. Yong1925
Norma J. Mattei2005	Owen LeBlanc1978	E.M. Freeman1951	E.H. Coleman1924
Barbara E. Featherston2004	Blaise M. Carrier1977	Bernard Dornblatt1950	Donald Drickerson1923
Charles E. Eustis	John F. Marshall1976	Walter H. Scales1949	Ole K. Olsen1922
Mark W. Snow2002	Alvin D. Kaufman1975	J.M. LeDoux1948	A.T. Dusenbury 1921
Miles B. Bingham2001	John F. Grosch, III1974	Leo M. Odom 1947	Arsene Perrilliat1920
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Mark A. Jusselin1999	Samuel M. Murphy1972	V.J. Bedell1945	W.B. Gregory1918
Todd A. Vincent1998	C. Carter Brown1971	David W. Godat1944	W.B. Gregory1917
Mark B. Dubroc1997	Robert N. Bruce, Jr	Alvin M. Fromherz1943	District Council Chair1916
O. Lee Underwood1996	Gerald R. Dyson1969	Frederick N. Billingsley1942	District Council Chair1915
Om P. Dixit1995	John W. Roach1968	John A. McNiven1941	District Council Chair1914
Paul B. Fossier, Jr1994	Prof. Beverly J. Covington 1967	Norman E. Lant1940	
Kam K. Movassaghi 1993	Prof. Walter E. Blessey1966	A.J. Negrotto	

Louisiana Past Presidents

ASCE-T&DI Louisiana Chapter News

By Michael Paul, PE - Newsletter Editor

Louisiana T&DI Scholarship Program

Since 2012 T&DI has been awarding two \$500 scholarships to junior and senior level university students who intend to pursue a career in the field of transportation. Funding for the scholarships is provided by the T&DI seminar proceeds. Applicants are required to submit a transcript with two academic recommendations, along with an essay regarding their interest in transportation studies to their advisers early in the Fall semester. The applications are then reviewed, and the recipients are selected by a subcommittee composed of Louay Mohammad, PhD, PE, F.ASCE; Bill Temple, PE; and, Dan Aucutt, PE.

In December, the scholarship subcommittee selected Alexandra Weeks and Peter Olson as the recipients of the 2019-2020 T&DI Scholarship. Weeks is pursuing a BS in Civil Engineering from the University of Louisiana and plans to graduate in the Spring of 2020. Olson is pursuing a BS in Civil



plans to graduate in the Spring of 2020. Each of the scholarship recipients received a \$500 stipend, which was sent to their respective engineering departments for distribution. Congratulations to the 2019-2020 recipients!

Engineering from LSU

Alexandra Weeks

Peter Olson

Emerging Trends for Durable Flexible Pavement & Engineering **Ethics Seminars**

On December 3, The Louisiana Chapter of T&DI hosted a joint topic seminar at Patrick Taylor Hall at the Louisiana State University.

The first seminar topic was Emerging Trends for Durable Flexible Pavement and discussed approaches to achieve durable pavements. Concepts presented included sustainable development, use of sustainable materials in flexible pavements, balanced asphalt mixture design approach, tack coat best practices, longitudinal joint specifications, construction best practices, thermal segregation specifications and construction, and warm mix asphalt technologies. Louay Mohammad, PhD, PE, F.ASCE presented this seminar and is a professor of Civil and Environmental Engineering and holder of the Irma Louise Rush Stewart Distinguished Professorship and Transportation Faculty Group Coordinator at LSU.

The second topic was Engineering Ethics. T&DI offered this presentation to provide engineers the opportunity to satisfy the Louisiana Professional Engineering and Land Surveying (LAPELS) Board requirement of one hour of engineering ethics training per annum. Christopher Knotts, PE presented this seminar is presently Chief Engineer at DOTD and was 2018-2019 LAPELS Chairman.

Short Span Steel Bridge Seminar

On January 15 the T&DI Louisiana Chapter hosted the Short Span Steel Bridge Seminar in New Orleans at the UNO Engineering



& DEVELOPMENT

LOUISIANA CHAPTER

Auditorium. This presentation discussed the advantages of replacing deficient and obsolete infrastructure using Short Span Steel Bridges. The steel industry has developed technological and design innovations for bridges under 140' that save significant time and costs for parish and state bridge officials. Over the past 10-years, over 5,000 bridge owners and designers have learned about the cost and time advantages of short span steel bridges through Short Span Steel Bridge Alliance [SSSBA] workshops and conferences throughout North America.

The speaker was Michael Barker, PhD, PE who received BS and MS degrees in Civil Engineering from Purdue University and PhD degree from the University of Minnesota and has been a participating member of the AISI Bridge Task Force and Design Advisory Group and is a Bridge Education Center representative to the SSSBA.

Louisiana State Science and Engineering Fair

T&DI will again be participating in the Louisiana State Science and Engineering Fair. The event will take place March 16-18, 2020 at the LSU Student Union Royal Cotillion Ballroom in Baton Rouge. As in past years, members of T&DI will serve as judges and present awards to the students with the top transportation and development related projects.

Looking Ahead

The intent of T&DI is to promote transportation and development as a career path, and to provide training and networking opportunities for all professionals involved in the transportation industry. If you are interested in co-sponsoring a seminar at your branch, the T&DI Louisiana Chapter has prepared a Seminar Coordinator's Check List to assist you in your preparation. Contact Gavin Gautreau Gavin. Gautreau@LA.GOV for a copy of the checklist. Our seminars are two hours in length and are typically presented from 5:30-7:30 pm in either the New Orleans or Baton Rouge area. We have also presented out-reach seminars with the ASCE Acadiana Branch and Shreveport Branch. We are open to co-hosting seminars in additional Louisiana cities if requested. In keeping with the intent of the Institute to provide training and networking opportunities for all professionals involved in transportation projects, the Chapter is planning the following future seminars:

- Asset Management for Agencies
- Mitigation Banking
- Green Infrastructure: Integrating
- Infrastructure Needs Bicycle Lanes /
- **Complete Streets** New Orleans
- Armstrong Airport **Bridge Approach**
- Slabs



From Left: Dan Snyder (SSBA), Dr. Michael Barker and Dan Aucutt

Branch News



ACADIANA BRANCH By Jacob Neu, El, Branch President

Greetings! The Acadiana Branch wishes you all a Happy New Year and hopes that everyone had a terrific holiday season.

Our Branch finished 2019 in strong fashion

Jacob Neu, El

with several well attended events and some exciting news.

First, the Acadiana Branch received \$900 in grant funds from Region 5 to sponsor a volunteering event that is currently being planned by the UL and MSU student chapters. The volunteering event will take place in Rockefeller Refuge in Cameron Parish, and it is intended to remove trash left behind after public use at fishing / crabbing piers and water control structures located throughout the area. These student chapters have conducted several of these events since the fall of 2016, removing a substantial amount of trash from the refuge since that time. Additionally, this event has developed into a strong recruiting tool for students. Our hope as a branch is that these students decide to transition into active professional members after graduation. We are extremely proud of our student chapters for their continued service effort.

Regarding professional members activities, I would like to thank Don Conrad with Forterra Pipe for sponsoring a dinner PDH session for our members in December. Conrad gave an informative presentation



(L to R) Acadiana Branch Paul Cazayoux and Jacob Neu at the JESC conference

on pipe installation and inspection that provided attendees with some terrific knowledge and insight which will be incorporated into future projects.

Also, in December, our branch and the local chapter of LES partnered together to host a Christmas Social. This social was highly enjoyable, as multiple types of engineers were able to have a nice lunch together and enjoy the new company.

In January, our branch did not host a regular monthly member meeting. However, LES allowed us to have a booth at the JESC conference in Lafayette to help promote the Acadiana Branch to civil engineers in attendance at the conference. We would like to thank Brenda Gajan and Keith St. Germain for allowing us to take part in their conference and for their generosity.

In other news, our Branch recently appointed a new chair to help us become a readily available resource for members in our underserved areas. Jason Neu, EI a volunteer of Lake Charles, LA will help to improve our presence in the Lake Charles area. Jason is currently planning a half day seminar for civil engineers in Lake Charles which will provide engineers with the opportunity to earn several PDHs; join ASCE if they are not already members; and, to meet the current officers of the Acadiana Branch. Details regarding this event will be finalized soon. If any members in our underserved

> areas would like to speak with Jason Neu or myself regarding this upcoming seminar or any other ASCE matter, please contact us at your convenience.

> Lastly, the spring conference that will be hosted by our branch has been finalized and registration is now open. The conference will be held on April 23rd and 24th at the City Club in Lafayette, LA. Included in this journal, you will find registration and sponsorship forms for this conference. Please note that online registration is also available. A link to this registration will be sent out to members of the section soon if you have not already received it. If you have any questions regarding this conference, please contact me at your convenience. Hotel accommodations will be at Spring Hill Suites (321 Settlers Trace Boulevard, Lafayette, LA 70508). Reservation can be made by calling the hotel at 337-981-5512 for the conference. Please mention "ASCE Conference" to get the discounted rate. The Acadiana Branch hopes to see you there!



BATON ROUGE BRANCH By Jarret Bauer, PE, Branch President

The ASCE Baton Rouge Branch has had some exciting events over the past few months.

Jarret Bauer, PE

Our luncheons have been well-attended in large part due to the work of our Director of Programs and our exciting lineup of speakers.

The membership took a field trip to Patrick F. Taylor Hall in November to visit Christopher Melson and Tran-SET, the Transportation Consortium of South-Central States. The attendees were treated to experiences in the BIM Lab, where engineers got to experience a 3-D virtual modeling space, as well as operate excavator simulators, and learn about exciting new research in the fields of Bendable Concrete and Self-Healing Concrete. The technology and research in these fields was truly fascinating!



LSU BIM Lab, 3-D virtual modeling space

Our annual Christmas Party was held a Bocage again this year. As with past years, the event was well-attended with a mix of undergraduates, young engineers, and seasoned veterans!



The Branch Board at Christmas Party (L to R) Jamal Steib, Robb Jewell, Venu Tammineni, Nedra Hains, Josh Olivier, Tyler Branch, Molly Bourgoyne, and Jack Koban (not pictured: Alicia Sellers, Sarah Ollenburger, and Jarret Bauer) Kristi Mirambell, PE spoke to the membership in January on "Bridging the Gap between Engineering and Construction." The presentation keyed in on the perceived gap in design and field application

ASCE Baton Rouge Branch sent one member to the National Convention, held this year in Miami. The trip was an exciting opportunity to meet with other members around the nation, learning and sharing philosophies on leadership, membership retention, and the positive influence of ASCE Nationally.

Jarret Bauer, PE, Baton Rouge Branch President; Beau Tate, PE LA Section



President; and, Bob Mora, PE in Miami, FL at the National ASCE Convention

ASCE Baton Rouge continues to hold the **Engineer IT for Kids** event at local middle and lower schools in the Greater Baton Rouge Metro Area. The lineup of schools continues to grow, and membership participation has been greater than expected. Schools have included Sherwood Middle School, Cedarcrest-Southmoor, BRCVPA, Audubon Elementary, White Hills Elementary, Dutchtown Middle, and Woodlawn Elementary. Please check the website for opportunities to volunteer!

Tyler Branch, PE and Jarret Bauer, PE held another successful "Bridging the Gap" downtown at the LSU Museum of Art, February 12, 2020. The topic was "Identifying and Cultivating Leaders". Our "Bridging the Gap" evening panel sessions offers an alternative to the traditional technical speakers at our ASCE Luncheon events. As with previous events, the panel discussion was interactive and in an informal setting. The event was FREE for all, and food and drink was catered. 1 PDH was offered for all attending.



Bridging the Gap Panel of Speaker included: Tony Arikol, PE - President, Professional Engineering Consultants Corporation; Kresten Brown, PE -Project Manager, Forte and Tablada, Inc.; and, Janet Evans, MBA, PE - Vice President of Louisiana Operations, Volkert, Inc



NEW ORLEANS BRANCH

By Constantine "Dean" F. Nicoladis PE, Branch President

The New Orleans Branch held a luncheon meeting at The New Orleans Hamburger and Seafood Restaurant on St. Charles Avenue on November 19, 2019. The speaker was Kristi Mirambelle, PE. The topic was Bridging the Gap between

Dean Nicoladis, PE

Engineering and Construction. The discussion focused on shifting views for a greater partnership between these two industries. On December 5, 2019 the ASCE New Orleans Branch and the Society of American Military Engineers held a holiday party at The Library on Prytania Street in New Orleans which started at 5:30 PM and lasted well into the evening. The event was well attended by more than 40 people with many attendees being members of both organizations. The New Orleans Branch held a luncheon meeting at The New Orleans Hamburger and Seafood Restaurant on St. Charles Avenue on December 17, 2019. The speaker was Herbert Miller PE, F.ASCE who is the President of the Southeast Louisiana Flood Protection Authority. Miller provided insight on managing clients and staff in the consulting engineering business based on his 42-year career in the public sector as a technical advisor and Director of Sewerage and Public Works and in the private sector as a civil engineering consultant.



SHREVEPORT BRANCH By Linsey B. Olivier, El, Branch President

I would like to start off by thanking all of our members of the Shreveport Branch for making the start of the fiscal year a successful one! I hope you all have enjoyed the holidays. I am looking forward to the events and positive changes that 2020 will hold!

Linsey B. Olivier, El

Our November luncheon featured Mikel Wilkens with Urban Ecoplan, LLC. Wilkens' presentation provided information regarding green infrastructure planning and implementation. He discussed his current projects with the San Antonio River Authority and his planning strategies to retrofit existing family subdivisions, commercial, and industrial developments to reduce erosion and storm water pollution. Wilkens and his team are also planning large-scale strategies to mitigate impacts from a massive highway expansion and the associated new development.



Mikel Wilkens with Urban Ecoplan, LLC presenting to the Shreveport Branch at the November Luncheon

The branch wrapped up 2019 with a successful Christmas Social hosted by the Branch and LES Shreveport Chapter at Flying Heart Brewery. We had a great attendance, and everyone enjoyed pizza and craft brews.

We had a busy start to the New Year! On January 16, 2020 we hosted a joint luncheon with Louisiana Engineering Society. Andy Brown with D&W Systems talked about using Electro Scan/FELL technology for gravity sewer assessments

January 24, 2020, the Shreveport Branch attended the Louisiana Tech Civil Engineering and Construction Engineering Technology Winter Banquet. The branch awarded scholarships to three engineer students in the LaTech ASCE Student Chapter. The three recipients are two seniors, Anna Katya Opel and Gabriel Clottey; and, one junior, Sydney Bratton. The students were nominated by LaTech Civil Engineering Faculty for outstanding academics and ongoing participation in ASCE. The Shreveport Branch would like to congratulate these students for their outstanding achievements!



Andy Brown with D&W Systems presenting Electroscan/FELL technology to ASCE Shreveport and LES Shreveport for the January Luncheon



Linsey Olivier, EI (Branch President), Ali Mustapha, PE (ASCE Region 5 Governor), and Omar Dawud (Branch Treasurer) representing the ASCE Shreveport Branch at the annual Civil Engineering and Construction Engineering Technology Winter Banquet at Louisiana Tech University

On



Officers with Outstanding Civil Engineering Student Award Recipients from left to right: Omar Dawud (Branch Treasurer), Gabriel Clottey (Senior), Sydney Bratton (Junior), Katya Opel (Senior), Linsey Olivier, El (Branch President)

ASCE-SEI New Orleans Chapter News By Mark Castay, PE

STRUCTURAL ENGINEERING INSTITUTE New Orleans Chapter

ASCE SEI New Orleans Chapter concluded a great year with several interesting seminars during the 2019 year which included Testing and Inspection Techniques for Transportation and Offshore and Marine Structures; Great Builders; and, Techniques and Design Considerations for Strengthening of Existing Concrete Structures. The committee also recruited several great speakers for the Louisiana Civil Engineering Conference and the details can be found at www.louisianacivilengineeringconference. org.

ASCE The most recent seminar for this guarter was Structural Design Highlights of ACI 318-19 presented by Mike Folse, PhD, PE, SE on November 7 & 14, 2019 that had over 120 attendees. The seminar was presented as a 2-part series held on subsequent weeks. The seminars were co-hosted with the local ACI chapter. ACI New Orleans Chapter donated two ACI 318-19 Code books which were raffled off during at the conclusion of the seminars to some lucky winners. In the first session, Dr. Folse covered chapters 1-10 and the second session covered chapters 11-27. Dr. Folse covered a plethora of information using real world design scenarios while highlighting code provisions he has used most often while engaged in the design of industrial, marine, and commercial reinforced concrete structures.

ASCE-SEI New Orleans Chapter is gearing up for another banner year of seminars and volunteer efforts. SEI members are getting ready to



Left to right: Kabir Mohammed, PE, Mike Folse PhD, PE, SE, Nick Maalouli, PE at the seminar

volunteer at Mathcounts, which is hosted by the Louisiana Engineering Society, and it is coming up soon. Mathcounts annually brings the brightest young minds from area schools to compete in mathematics at the UNO Civil Engineering Building. Top scoring students can then go on to regional and national events. If you are interested in volunteering or sponsoring, please contact us. There are several other seminar topics that are in progress of being scheduled, so stay connected with us to get the latest information. For more details visit SEI NO Chapter on www. asceneworleans.org/events/ . SEI NO will sponsor awards at the Regional Science Fair as

The committee is looking for great topics and speakers for future presentations, if you have any leads or ideas, please reach out! Members with expertise in the field of structural engineering are welcome to join the Executive Committee. For any suggestions and information on joining the Executive Committee, contact Chairman Kabir Mohammed, PE at asceseinola@gmail.com. If you would like to add your email to our mailing list, please visit ASCE New Orleans Branch website at www. asceneworleans.org to do so.

well.

Seminar Structural Design Highlights of ACI 318-19 by Mike Folse, PhD, PE, SE presented by ASCE-SEI NEW ORLEANS CHAPTER and Co-sponsored with ACI Louisiana Chapter at the University of New **Orleans Engineering Auditorium**



Structural Design Highlights of ACI 318-19 presented by ASCE-SEI NEW ORLEANS CHAPTER and Co-sponsored with ACI Louisiana Chapter at the University of New Orleans Engineering Auditorium

Student Chapter News

LOUISIANA TECH UNIVERSITY By Sydney Bratton, ASCE Student Chapter Secretary

Louisiana Tech University ASCE Student Chapter had a great fall quarter and start of winter quarter. This fall we held our first ever Civil Engineering Week where we had industry professionals speak to students about the opportunities that the civil engineering field has. During the fall, the student chapter also made good progress with our concrete canoe team. The student chapter theme and design were finalized, and our canoe mold has been cut out and prepared. Now our canoe team is preparing for the canoe pour day and are excited and looking forward to getting another step closer to the regional conference.

This winter we had a team attend the Asphalt Road-eo competition in Texas where they designed and manufactured an asphalt slab for rutting, skid resistance, cracking, and sustainability testing. This was the first year a Louisiana Tech team competed at the Road-eo competition, and our team placed first overall!

Coming up, our ASCE chapter along with LaTech's AISC, AGC, and NASTT chapters are hosting our annual winter banquet. Our goal with this year's Winter Banquet is to make it more of a networking event to allow industry professionals and students to interact with one another. Our chapter is very excited about the events coming up, and we are looking forward to competing at the Deep South Conference in the spring. With such a successful fall and great start to the winter, we are excited to see what the rest of the year will bring for our chapter!



Concrete Canoe progress: finished canoe mold being prepared for pour day



1St Place team at the 2019 Asphalt Road-eo Competition

LOUISIANA STATE UNIVERSITY By Sydney Sziber, LSU Student Chapter President

The Fall 2019 semester was full of professional advancements for the LSU ASCE Student Chapter. The student chapter had two main goals this semester: increase our active membership and improve our bi-annual career fair.

Our plan for the first goal focused on increasing the number of members that participate in our activities whether it be our semimonthly meetings, the competition teams, or the semiannual career fair. One step we took to achieve our first goal was to host speakers at our meetings that represent all disciplines of civil engineering. Thanks to Fluor, Forte and Tablada, GeoEngineers, and Jones Carter we achieved this goal and saw a rise in our average meeting attendance. We also featured an excellent presentation from the ASCE Baton Rouge Branch on the benefits of professional licensure and joining a professional organization. Additionally, we encouraged participation through some field trips and fun activities such as tailgates and socials with the competition teams. On Friday, November 1, 2019 a group of ASCE students attended Precast Days at Gainey's in Holden, LA where we toured their facilities and learned about the advancements they are making in the precast field.

Each semester we host a career fair, and this year we aimed to improve our career fair to better serve the students. We accomplished this goal by featuring 20 companies representing all aspects of civil and environmental engineering. We also hosted guests from LAPELS and the LSU Graduate School who informed students of the steps taken to attain a PE license and the benefits of a graduate degree. Over 200 students attended the career fair including students from LA Tech, McNeese, Southern, UL, and UNO.

In the upcoming semester, we are looking forward to competing at the Deep South Conference at Jackson State University, attending a few community service projects such as Geaux Big LSU, and furthering our knowledge of the civil engineering field through our guest speakers. If you are interested in speaking at one of our meetings, attending the career fair, or sponsoring one of our competition teams please contact asce@lsu.edu. GEAUX TIGERS!



Touring the facilities at Gainey's Precast Days (from left: Tony Carleton, Emily Rone, Sabrena Williams, Belle Kilpatrick, Robert Spruell)



Officers at Fall 2019 ASCE Bayou Regional Career Fair (from left: Sydney Sziber, Robert Spruell, Perry Leleux, James David Fuller, Emily Rone, Eric Wright)

UNIVERSITY OF LOUISIANA AT LAFAYETTE

By Lani Orgeron, Student Chapter President

At the end of October, a group of UL ASCE/ACI students participated in the ACI National Convention. This convention took place in Cincinnati, Ohio. They competed in the FRP Composite Beam Student Competition where they made a beam using non-metal rebar. This was a great experience for these students as the competition allowed for them to connect with professionals and schools around the country and learn about innovative concrete structures. Through this competition they learned a huge amount about concrete, its properties, and how it acts under certain tensions and compressions.



The UL students who attended the ACI National Convention (back left to right): Peyton Bailey, Josh Hoffpauir, Nicholas Scalfano, Troy Breaux, Blade Leger, and Ivy Thibodeaux, (front left to right): Laura Manuel, Alex Weeks, and Annie Gutierrez

The student chapter started the month by celebrating ASCE day on November 5, 2019. It was ASCE's 167th birthday! We participated in the online celebration by posting a picture on our Instagram, which you can go follow @asce_cive_ull. We took a group picture with balloons and party hats! Our student chapter is very thankful for ASCE and all of the friendships and experiences that this organization has brought to all of our members.

On Thursday, November 14, 2019 a large group of the student chapter members attended the 2019 ASCE Bayou Regional Career Fair in the Cambre Atrium of LSU's Patrick F. Taylor Hall. Our members had great experiences at this career fair. Some of the attendees are already being offered some great opportunities as a result of this fair. Thank you to LSU for continuing to host this event and for all of the hard work that the student chapter does to make it a success each year.



The UL ASCE student members at the LSU Career Fair (left to right): Blade Leger, Stephan Williams, Ivy Thibodeaux, Lani Orgeron

UL Student Chapter hosted a joint meeting on November 25, 2019 with the Acadiana Branch at UL in Madison 101. Before the meeting we provided Cane's chicken (sadly with no Canes sauce. We are still so sorry about that!) and drinks in the lobby where the attendees could mingle. An engineering ethics presentation was given by Tom Carroll, PE, PLS. This was a very informative presentation for us, providing us with information and resources that will be useful in helping us address ethically significant problems that may arise while working in the future. As future young engineers we know that professionalism and ethics are very important.

On November 26, 2019 we had a Deep South interest meeting. This meeting was hosted by our Deep South Coordinator, Nick Scalfano. This was our first general meeting for the annual conference. The individual teams for all of the competitions such as the concrete canoe, sustainable infrastructure, and steel bridge teams have been working hard on starting their projects. We are all so excited as Deep South is always an event that we look forward to.

With this our Fall semester has ended and we are getting ready to start our Spring semester! We are excited to see what the future brings.

For additional information please feel free to contact us at ullafayetteasce@gmail.com or visit ulcivil.weebly.com. Geauxxx Cajuns!!

UNIVERSITY OF NEW ORLEANS

By Trevor Paitz, Student Chapter President

The UNO ASCE student chapter is starting off a great spring semester. With the regional competition just around the corner, the steel bridge and concrete canoe competition teams have kicked it into high gear. The designs for both the steel bridge and concrete canoe have been finalized, materials have been ordered, and construction is beginning to take place. The ASCE officers are very excited about the teams this year as more students than ever are participating. Steel bridge team co-captain Kelsie Hazel says, "The great part about this year is that we have so many new and young faces on the team!" One of the student chapter's goals for the 2019/2020 school year was to bring in younger members. So far, this has been a great success.

The monthly general meetings hosted by the UNO ASCE student chapter are beginning again this month, and the students can't wait to get started. At each meeting a member of the professional engineering community is invited to give a talk to the chapter. The students really enjoy hearing about the "real" world of engineering and gain not only professional knowledge, but also opportunities to network with existing engineering firms. This year the ASCE student chapter has been able to bring in professionals that are seeking students for upcoming internships or full-time, entry level, engineering positions. This trend is planned to continue.

The UNOASCE student chapter will be participating in many engineering department and school-wide functions this semester. Just a few of these events will include a spring Get to Know UNO, an engineering job fair, and a paper bridge competition for an underclassmen engineering course. These events are great opportunities to recruite new members to the ASCE student chapter and receive sponsorships from engineering firms within the community.

The outlook for the spring 2020 semester is great, and the UNO ASCE student chapter will keep the momentum going!

SCE



Figure 1: Members of the ASCE Concrete Canoe Team



Figure 2: Members of the UNO Steel Bridge Team

MANAGE YOUR STUDENT CHAPTER

Find everything you need to stay organized and keep your Student Chapter moving forward! https://www.asce.org/studentorgresources/

ASCE STUDENT CHAPTER HANDBOOK

The ASCE Student Chapter Handbook is available to official ASCE Student Chapters. Contact ASCE Student and Younger Member Programs to receive the latest version (revised 9/18) of the ASCE Student Chapter Handbook.

ASCE MEMBERSHIP TOOLKIT

Growing your student chapter is easier than ever with new recruiting tools. Quick downloads, eye-catching posters and fun, free giveaways—everything you need for club fairs, classroom presentations and promotions.

AMERICAN SOCIETY OF CIVIL ENGINEERS

SOUTHERN UNIVERSITY

By Orisamola Richardson, Student Chapter President

The Southern University chapter of ASCE is preparing to start the spring semester with the goal of

reaching new members to grow their chapter and attend the Deep South Conference. The student chapter is currently designing their concrete canoe so that they may compete in the race. The SU Student Chapter has been involved in various community service activities over the last few months.



Southern University Student Chapter at "Boo at the Zoo". Pictured: Tia Johnson, Courtlynn Thomas, Spencer Williams, D'Asha Wright, Orisamola Richardson

These include spending time with 6th-8th grade students from Southern University Lab School while engaging in STEM activities, volunteering for Boo at the Zoo, performing mock interviews for Scotlandville High School students, and volunteered with the Department of Civil Engineering to recruit high school students into the program. They also attended the Fall 2019 ASCE Bayou Regional Career Fair and other networking events.



Southern University Student Chapter at LSU Career Fair. Pictured: Makenzie Richard, Courtney Batiste, Jelani Smith, Richodd Matthews, Orisamola Richardson



Southern University Student Chapter at LSU Networking Event: Richodd Matthews, Courtlynn Thomas, Jelani Smith



Southern University Student Chapter at Scotlandville High School Mock Interviews. This was a joint event between SU NSBE and ASCE. The only ASCE members are the 2 on the right. Orisamola Richardson, D'Asha Wright

Southern University Student Chapter at Southern Lab STEM Activities



Courtlynn Thomas with Southern Lab Student



Southern Lab Students



Orisamola Richardson with Southern Lab Students

- CALENDAR OF EVENTS -

201	0-1	20	20	
201	9-4	20	24	1

2020 ASCE Legislative Fly-In	Marc	h 11–12, 2020
https://www.asce.org/legislative_fly-in/		
2020 Deep South Conference	April	2-4, 2020
https://www.asce.org/student_conferences/		
2020 ASCE Louisiana Section Spring Conference Lafayette, LA (see registration insert in this journal http://branches.asce.org/acadiana/2020-asce-spr	April) ing-conference	23–24, 2020
Events are constantly being updated online:		
For ASCE Society events please see online: https://www.asce.org/conferences_events/ https://www.asce.org/student_conferences/	For ASCE Baton Rouge events please see online: http://branches.asce.org/baton-rouge/events	For ASCE Shreveport events please see online: https://www.facebook.com/ASCEShreveport/
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For more events visit the ASCE Events Calendar: http://www.lasce.org/calendar.html

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