

National Capital Section

September 2019 Volume 66, Number 1

Visit ASCE-NCS on the web: http://www.asce-ncs.org

ASCE - NCS Presentation on September 12, 2019

Improving the Health of the Bay: The Baltimore City Implements Enhanced Treatment Facilities at their Largest Wastewater Treatment Plant.



The Baltimore City Department of Public Works owns and operates two of the largest water resource recovery facilities (WRRF) in Maryland with a combined treatment capacity of nearly 250 million gallons of dry flow per day. Both facilities have recently implemented advanced treatment technologies to further reduce discharge of nitrogen and phosphorus ("nutrients") to the receiving streams, as part of the Chesapeake Bay Program's goal to improve the health of the Bay and the water quality in the Chesapeake Bay watershed.

The Back River Wastewater Treatment Plant Enhanced Nutrient Removal Upgrade involved the integration of 52 of the world's largest denitrification filter cells into the existing plant, originally built in 1911. These filter cells were specifically designed for this project. Results show the technology has reduced the nitrogen and phosphorous load discharged into the Bay by nearly 2 million pounds in its first year of operation. This project was awarded the 2019 Outstanding Civil Engineering Achievement Award from the Maryland

Section of ASCE and the 2019 National Grand Award by the American Council of Engineering Companies (ACEC).

At the larger of the two facilities, the Back River WRRF, the City is also now midway through a major construction program that includes new facilities to handle wet weather flows to the plant. This program is part of the City's Wet Weather Consent Decree by EPA and requires elimination of sanitary sewer overflows (SSO), reduction of inflow/infiltration (I/I), sewer system rehabilitation and improvements to the conveyance capacity. The total construction cost for the nutrient removal upgrades and the wet weather facilities is nearly \$1.2 billion.

Please join the National Capital Section on Thursday, September 12, 2019, as Per Struck presents on:

- A brief overview of the City's phased construction program
- Design, construction and startup of the \$500M+ enhanced nutrient removal upgrade at Back River WRRF

Please join us on Thursday, September 12 at the Hilton Arlington, 950 North Stafford Street, Arlington, VA, on the second floor in the Gallery Ballrooms. Parking is available at the hotel (\$10), at the Ballston Mall garage (\$1 after 6 pm), and on the street (free after 6 pm). The Hilton is on the same block as the Ballston Station on Metro's Orange and Silver lines. Registration and networking will be from 6:00 to 6:45pm, followed by dinner. The program will end by 8:30 pm. The cost is \$45 for those preregistering, \$10 for students and \$55 for walkins, as space allows. For questions, please contact Emily Dean. Please click here to register by Monday, September 9.

Note that no-shows will be charged the full registration fee. We welcome walk-ins, including any registrations made after the guaranteed number of guests is provided to the hotel. However, the cost for walkins is higher because the Section is charged accordingly by the hotel for late registrations.

At this meeting, we will also be inducting our NCS Officers and Directors for the 2019–20 Section year.

About the Speaker:

Per Struck, P.E., BCEE, is a Civil Engineer and vice president at the consulting firm of Whitman, Requardt & Associates, LLP in Baltimore, Maryland. He has more than 25 years of experience in the planning, design and upgrade of wastewater treatment facilities.

President's Corner

Hello, National Capital Section!

Can you believe it is already September? We were busy over the summer with various committee meetings and outings, and of course, our Annual Planning Meeting in June. Some exciting things to

look forward to include a revitalized Sponsorship Campaign, a new Board of Directors starting next month, and engaging Section Meeting topics. Please note, our September Section meeting will be held on a Thursday



evening due to a scheduling conflict with the hotel.
Please keep an eye out for the upcoming meeting invitation for exact details.

Our new and improved Sponsorship Campaign is a great way for your company to show its support of ASCE-NCS. We offer many levels of

sponsorship, with significant benefits and opportunities to showcase your company. We can surely build a sponsorship package that works for you! Please let us know if you are interested in becoming a sponsor!

As we look forward to turning over the Board of Directors, I just want to say it has been both an honor and a pleasure to be President this past year. Next month I will transition into the role of Past-President, but look forward to continuing to serve on the Board of Directors. Lastly, thank you to all of you for your support and encouragement over the year.

See you soon!

Emily Dean
ASCE-NCS President

ASCE-NCS Monthly Dinner Meeting

October 2019 Preview

Title

United Nations Sustainable Development Goals

Preview

The United Nations' Sustainable Development Goals (SDGs) are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including those related to poverty, inequality, climate, environmental degradation, prosperity, peace, and justice. The Goals interconnect, and in order to leave no one behind, it is important that we achieve each Goal and target by 2030. The ASCE-NCS October 2019 Dinner Meeting will focus on SDGs that impact the field of civil engineering and how our meeting these goals will affect our world now and in the future. Among the goals that will be discussed will be Goal 6: Clean Water and Sanitation, Goal 7: Affordable and Clean Energy, Goal 8: Decent Work and Economic



Growth, Goal 11: Sustainable Cities and Communities, and Goal 13: Climate Action.

Speaker

William E. Kelly, Practitioner Adjunct Faculty in Sustainability, George Mason University



Biography

William E. Kelly, Ph.D., P.E., recently retired as director of external affairs at the American Society for Engineering Education (ASEE). At ASEE, his responsibilities included the engineering dean's council, ASEE's K-12 activities, and ASEE's ABET activities. Prior to joining ASEE in September of 2007, he was a professor of civil engineering at

the Catholic University of America in Washington, D.C. where he also served as dean of the school of engineering from 1996-2001. While dean, he served on the JETS board and the board of directors for the Washington ACE mentor program. Dr. Kelly was on the ABET **Engineering Accreditation Commission** (EAC) from 1993-2003 and was chair in 2001-2002. Currently he is a member of the American Society of Civil Engineers (ASCE) Committee on Sustainability and is teaching sustainability as a practitioner adjunct faculty member at George Mason University. He is also on the Board of Directors of the Civil Engineering Certification Board. Dr. Kelly received his Ph.D. in civil engineering from the University of Notre Dame and received an engineering honor award from his alma mater in 1999.

Newsletter

Maria Raggousis, Editor

October 2019 Issue Deadline: September 16, 2019

To Submit Articles: newsletter@asce-ncs.org

NCS eNewsletter Archives: go to www.asce-ncs.org and view along the sidebar

Address Changes: Call 1-800-548-ASCE, e-mail member@asce.org, visit www.asce.org, or write: ASCE – Membership, 1801 Alexander Bell Drive, Reston, VA 20191. Include your membership number.

National Capital Section

Officers (2018-2019)

Emily Dean, President
Kelly Cronin, Vice President
Piers Causton, Treasurer
Michael Venezia, Secretary
Maria Raggousis, Newsletter
Editor

Joe Whartenby, YMF President Victor Crawford, Director Stuart Crooks. Director Jameelah Ingram, Director Jeff Tan, Director

Brian Barna, Past President Jordan Pitt, Previous Past

Lisa Anderson, Reston Branch President

Committee Chairs

Please refer to the <u>NCS website</u> for a current list of NCS committees and chairs.

Amazing Success Stories from Dr. Z's Students at The University of the District of Columbia and George Mason University

We hope our readers had an enjoyable and productive summer. For us September means the beginning of another exciting academic year. We truly enjoy being "Engineering Educators" since we are continuously working with young minds, inspiring, motivating and most importantly educating them to become our future engineers.

For this month's ASCE-NCS newsletter article, I've decided to share some amazing success stories of my students both at UDC and GMU. As you may already know, nothing gives us educators more joy than talking about our students' success stories. For this article I've picked six amazing students among five hundred.

Victoria Church, unquestionably Dr.Z's best student at UDC. She transferred from UVA, is the heroine of UDC's Steel Bridge victory, and is the driver of UDC's MARS ROVER of NASA's Human **Exploration Rover Competition. Victoria** wrote "Dr.Z. thank you so, so much for supporting my Structural Engineering education and for being a HUGE ADVOCATE for me. You helped instill confidence in myself that I will take with me to my new job at Jacobs." According to rumors, Victoria's starting salary made some young colleagues envious! Good luck Victoria! You'll be a great engineer; don't forget your alma mater and keep making us proud. Also, it is not too early to start working for your PE exam. Let us know if you need any help.

Mutlu Gunduz, one of my BEST students at GMU who took my CEIE-400 class there wrote, "I have a great news for you Dr. Z. Yes, I have CONQUERED my FE exam on my first try. I cannot tell you how happy I am. First I was a little nervous but having Dr. Z in my corner made all the difference. In the exam, on several questions, your well known "Guerrilla Methods" made all the difference and I easily solved them in no time. Even though a thousand words of gratitude would not be enough, I still want to say again, THANK YOU VERY MUCH Dr. Z. for your time, effort, and mentorship. By the way let me know when you are free. Because Starbucks coffee will be on me this time, as I



promised." We wish Mutlu good luck! We've already told him to start preparing for his PE exam immediately. Mutlu has our phone number; our commitment to our students is not for a semester, but for life.

Sandae Tait, one of our star students at UDC, took the FE exam while taking our FE Prep class (CVEN 418) at UDC and CONQUERED it on his first attempt. Yet, Sandae's success story didn't end there. He applied to COLUMBIA UNIVERSITY for his graduate studies in Civil Engineering and in May 2019 he received a full scholarship. We wish him good luck.

Samantha Babbitt, one of our best students in CEIE-400 classes at George Mason CONQUERED her FE exam on her FIRST try. Samantha sent us a note (including Mr. Simmons) and said "Your techniques and GORILLA formulas saved me lots of time in the exam. Also, your calculator shortcuts saved me a ton of time which we learned in your classes. Thank you." I am glad our instruction and tools in CEIE-400 helped her to conquer her FE exam on her first try. We wish Samantha all the best.

Stacey Lockerman was UDC **ASCE Student Chapter president** and another star student from UDC. I met her first time back in 2013 as a Mechanical Engineering major in my Intro to Engineering freshman class. Immediately I knew that she was a very special student. At the end of that semester Stacey decided not only to switch to Civil Engineering but also

decided to attend to our pro-bono Saturday classes for FE and PE exams at UDC. Back in 2013 she wrote "Dr. Z. Having just begun college this semester, I still have a long way to go, but for fun I already try to construct my own formulas based on different topics. When it comes to being creative, I am always trying to come up with new ideas by thinking of ways things can be done differently or looking at things from a different viewpoint." In May 2019, Stacey graduated from UDC and received a full scholarship from COLUMBIA UNIVERSITY. We wish Stacey all the best. She will be a great Civil Engineer.

Mera Shabti was a STAR student in our CEIE-400 class at George Mason. On March 29 and 30, Mason's Student Chapter of the American Society of Civil Engineers (ASCE) and the Sid and Reva Department of Civil, Environmental and Infrastructure Engineering (CEIE) at GMU hosted the annual ASCE Virginia's Conference and various competitions were organized. Amazingly, Mera was the 1st PLACE WINNER at Marr Technical Paper Competition, Hardy Cross Competition, and Geotechnical Challenge GMU Team. Department Chair Prof. Sam Salem and ASCE faculty advisors Profs. Liza Durant and Doaa Bondok provided guidance and support throughout the competition. We wish Mera all the best. She will definitely be a great Civil Engineer.

Until next time, Ahmet Zeytinci (Dr.Z.) az@akfen.com

The Future of Professional Engineer Seals

By Ranjit S. Sahai, PE, F.ASCE

Construction documents and land survey drawings are sealed and signed to certify the identity of the professional engineer in charge of their development.

The use of seals as a means of legal authentication dates to the earliest known civilizations of Ancient Greece and Rome in the 3rd millennium BC (3000 through 2001 BC).

Historically, the impression of seals was made on wax or resin applied to documents. Though their use continues to this day, especially on ceremonial documents, the 20th century saw them superseded by inked or embossed and rubber seals.



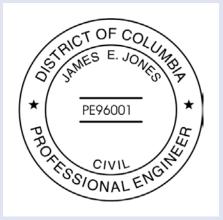
A modern wax seal

As noted in my, "Emerging Revolution in Engineering," article on Page 4 in the February 2018 issue of this newsletter, the first revolution (3000 BC to 1950) was the use of physical medium to develop construction documents. This was followed by the second revolution (ushered in 1962 by the invention of SketchPad by Dr. Ivan Sutherland) that was marked by the use of electronic medium projected on planar surfaces, to develop construction documents.

As we march onward into the third revolution that has enabled the projection of electronic models in space through the use of mixed reality technologies, the delivery of construction documents to customers is typically in the form of electronic files.

Use of electronic media, in lieu of physical media, for the distribution of content began its ascent with the entertainment industry, i.e. music and film. This is when the industry, due to concern for piracy of content - because the creation of an exact replica of an electronic file is a trivial task - was instrumental in the development of DRM (Digital Rights Management) technologies that can verify the legitimacy of ownership of purchased electronic content.

When you borrow electronic books from your library that automatically return on their due date, or purchase or stream digital music or movies,



A Professional Engineer Rubber Seal

DRM technology is at play. Federal and state laws were also passed in recent decades to address the need for authentication of electronic content, including construction documents.

This article continues next month by surveying the landscape of digital seals and signatures.

About the Author

speaker.

Ranjit, a Past President (2013-14) of ASCE-NCS, is a principal and founder of RAM Corporation, a firm serving State DOTs with a focus on traffic engineering design, stormwater facility inspections, and IT solutions for engineering workflows. He is also an author and









AAMA and IGMA to Unify as One Combined Organization

Two Industry Leaders, One Expert Source

Aug. 1, 2019 – The memberships of the American Architectural Manufacturers Association (AAMA) and the Insulating Glass Manufacturers Alliance (IGMA) both voted to proceed with combining into one organization with a new name, Fenestration and Glazing Industry Alliance (FGIA). The formal ballots of the AAMA and IGMA memberships were released on July 2, along with the full prospectus outlining the strategy for structuring, operating and branding the new organization, which included adjustments and clarifications to the proposal, based upon member feedback.

AAMA and IGMA announced unification discussions a year ago, with the goal of creating a new organization that can better serve the North American fenestration industry. During that time, an exploratory team from both organizations developed a framework for the new organization, and information was continually shared with members during development.

Future Plans

Beginning in August, the two existing Boards will work together to execute the unification implementation steps throughout the remainder of 2019. A strategic planning meeting will be scheduled (tentatively in October) to blend the vision and priorities for the new organization for the next three to five years. And, the new organization brand development will begin.

Combined Benefits

said AAMA Board

(Kawneer).

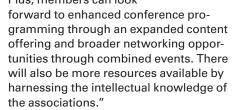
Chairman Donnie Hunter

"The value of the new organization will be a stronger industry voice, offering members and the industry single-source access to critical information,"

25

"With knowledgeable professionals from both the fenestration and glass industries, better synergy for the whole finished fenestration product will be available, as well as direct access to Canadian market, codes and regulatory expertise. A combined organization also delivers expanded technical competencies and a broader document base to support more extensive educational opportunities for members," he continued.

IGMA Board President Nathalie Thibault (Prelco) added, "These expanded technical competencies will further support educational opportunities. Plus, members can look



"A stronger financial position allows for future investments in industry research, technical resources and educational programs, which solidifies the new organization's position as the single source for the industry moving forward," Thibault concluded.

Brand Equity

While both Boards recognize the many combined benefits available to AAMA and IGMA members, the organizations also acknowledge the value in retaining separate brand equity in certain services such as technical standards and certification programs. Therefore, the branding strategy allows for an indefinite time period where the brand equity of both AAMA and IGMA are maintained for these aspects of the new organization.

About IGMA

The Insulating Glass Manufacturers Alliance (IGMA) is the North American association of insulating glass manufacturers, suppliers of component materials and other industry-related professionals dedicated to upgrading product performance by promoting awareness of technological developments in the industry. In 2000, IGMA was created as a result of a successful merger between the Insulating Glass Manufacturers Association of Canada (IGMAC) and the Sealed Insulating Glass Manufacturers Association (SIGMA). Today, IGMA represents 140 members across North America. For more information, please visit https://www.igmaonline.org.



About AAMA

The American Architectural Manufacturers Association (AAMA) is the source of performance standards, product certification and educational programs for the fenestration industry. Founded in 1936, AAMA is the leading trade association representing over 300 members producing window, door, skylight, sloped glazing, curtain wall and storefront products and components for both the residential and commercial construction markets across North America. For more information, please visit https://aamanet.org.





SPONSORSHIP OPPORTUNITIES (2019/2020)

Questions? Contact Corporate Relations Committee Chair Lynn Mayo at (202) 681-3030 or Lynn@RePictureEngineering.com

PLATINUM: \$5,000

Recognition at Annual Awards Banquet, including <u>four</u> passes

Business card recognition in eNewsletter for one year

Recognition on Section website

Firm spotlight in two newsletters

Exhibit Space & Introduction at one Section Meeting, plus eight section meeting passes in year

Five copies of Centennial Commemorative Book

Recognition at all Section Meetings

Recognition in each Section Meeting email announcement

(only 2 available)

GOLD: \$2,000

Recognition at Annual Awards Banquet, including <u>two</u> passes

Business card recognition in eNewsletter for one year

Recognition on Section website homepage

Firm spotlight in one newsletter

Exhibit Space & Introduction at one Section Meeting, plus two section meeting passes in year

Two copies of Centennial Commemorative Book

(only 6 available)

SILVER: \$1,000

Recognition at Annual Awards Banquet, including one pass

Business card recognition in eNewsletter for one year

Recognition on Section website homepage

BRONZE: \$500

Recognition at Annual Awards Banquet, including one pass

Business card recognition in eNewsletter for one year

Why Sponsor?

- Our Section Meetings attract some of the best civil engineers in the DC area and are an opportunity to meet potential clients, teaming partners, and staff.
- The Annual Awards Banquet attendance includes many award winning leaders in the industry and is a great opportunity to engage with our region's outstanding civil engineering students.
- Our eNewsletters are issued throughout the year and are distributed to more than 8,000 local engineers.

Sponsors	hip	Form
-----------------	-----	------

Please email completed form to: Lynn@RePictureEngineering.com $\,$

Company:

Address:

Contact Person:

Email Address:

Enter Sponsorship Level Enter Amount

\$

Total

Please make checks payable to **ASCE-NCS** & mail to: ASCE-NCS | PO Box 25186 | Arlington, VA 22202 To pay by credit card, please contact treasurer@asce-ncs.org

ASCE-NCS Committee and Branch News and Updates

ASCE NCS Member Survey

Call for Volunteers! we are planning an ASCE NCS Member Survey and are reaching out for assistance in the planning. The previous member survey occurred in 2009 and we are due for another:

- Purpose of Survey: Poll members on how we are doing and how we can improve their Section experience.
- Purpose of Committee: Volunteers will develop questions to ask for an on-line survey to be issued using Constant Contact and questions for targeted one-on-one questions of selected others. Committee will analyze results and prepare recommendations for consideration.
- Networking Skills Gained: A great way for members to meet new people and get involved in the Section.
- Time Commitment: Approximately 8-10 hours between the first meeting and the end of the year. Most work to be done by conference calls.
- When: Anticipated first call before September 30th

Please reach out to Norine Walker via email: nwalker@systra.com or phone: 703-740-7996 by September 20th if you are interested in becoming involved in the planning of the ASCE NCS Member Survey!

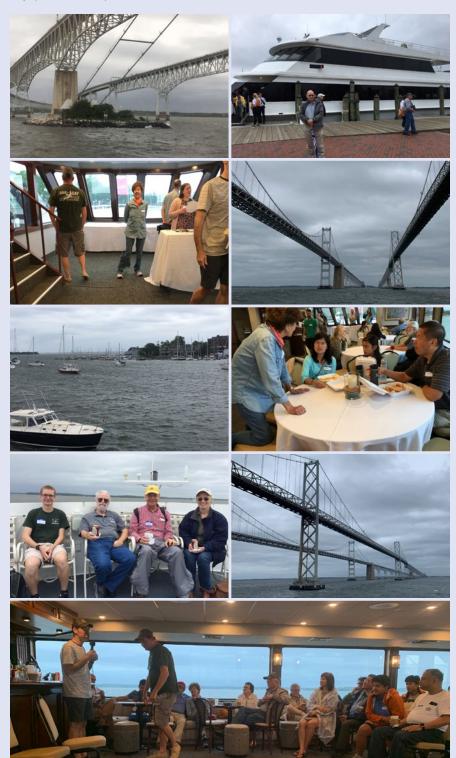
AEI DC Committee

The Architectural Engineering Institute (AEI) is working towards starting a DC chapter!

The Architectural Engineering Institute of Washington DC is a professional club aimed to provide experienced professionals and individuals entering the industry an environment to collaborate on new and upcoming industry improvements. As a member of the AEI Washington DC Committee, you will be involved in events that emphasize professional development through innovation and collaboration. Through events such as, social gatherings, community service, trips and activities, AEI Washington DC hopes to enrich your leadership development and industry knowledge by creating long lasting relationships with industry leaders. To learn more about upcoming events and information please check out our website or continued on page 8

ASCE NCS Boat Tour Recap

On Sunday, June 9th, ASCE NCS hosted a Chesapeake Bay Bridge and Coastal Regions Boat Tour taking off from Annapolis City Dock in Maryland. We hope you had a wonderful time and look forward to many more! In the meantime, enjoy the candid photos sent to us from the attendants.



Photos by Ivan Montalvo, Elena Rocchio, L.J. Sauter, Jr., Robert Yingling, and Vince Berg.

email aei.washingtondc@gmail.com! Don't forget to follow us on Instagram @aei_dc.



AEI DC recently hosted a happy hour at Tonic at Quigley's near Foggy Bottom Metro Station in Washington, DC. The very successful event brought in over 30 people from across the industry interested in learning more about our chapter as we start growing our roots. Stay tuned as we are planning our social, professional, and community events for the 2019-2020 year!



ASCE NCS Younger Member Forum

By Maria Raggousis, EIT, YMF Secretary/ Newsletter

Monthly Happy Hours. The NCS Younger Members Forum (YMF) holds monthly happy hours, generally alternating between Arlington, VA



and Washington, DC. Happy hours are usually the first Wednesday of each month unless a holiday falls during that week. The NCS YMF enjoyed a slew of monthly happy hours over the summer, including a bustling night at O'Sullivans Irish Pub in Arlington, VA on Wednesday, August 7th, a view of the water taxi at Cantina Bambina in Washington, DC on July 10th, and a relaxing night on the patio at Wet Dog Tavern near U Street in Washington, DC on June 5th. Despite vacation season, approximately 10-15 members attended each event!

In September, the group will be hosting their 2019-2020 Annual Planning Meeting! The event will be held on Tuesday, September 17th, at 6:00 PM at Ragtime near Courthouse Metro Station in Arlington, VA. If you'd like to get more involved with ASCE NCS YMF, this event is your chance! We will be electing new executive board positions and planning out our social, professional, and community events for the year.

If you have suggestions for professional development meeting topics, or would like to become more involved with the YMF in other areas, please contact the YMF President at ncsymfpresident@ gmail.com.

Stay Connected! Check out photos and stay up-to-date with YMF events by visiting the new YMF Facebook page. Also, follow us on Twitter (@asce_ncsYMF).

Get Involved! Are you interested in getting involved with more Younger Members activities? Do you have ideas for social events or volunteering activities? Would you like to be a board member? The NCS Younger Members Group is always looking for new members! Let us know if you are not already on our

mailing list! If you would like to become more active with the YMF or would like more information on our events, please email the YMF President.

Reston Branch

By Christopher J. Friend, P.E., Reston **Branch At-Large Director**

On September 9th, the Reston Branch will host our first lunch meeting of the 2019-2020 season. Michael Loulakis, President of Capital Project Strategies, LLC, will present on current trends for delivering capital projects. He will discuss the variety of project delivery systems being used regionally and nationally, as well as the key challenges and opportunities they provide. Prior to the meeting, our new Reston Branch Board members will be installed by Jack Raudenbush, ASCE Director of the Region 2 Board of Governors.

At the end of our 2018-2019 season, the Reston Branch hosted two lunch meetings at ASCE Headquarters, one in April and one in May. On April 23rd, Gary Runco, the District Structure and Bridge Engineer for VDOT NOVA District, discussed the current state of the NOVA District's structure and bridge inventory. The presentation highlighted the District's current challenges and goals, as well as it's typical operations. Gary also discussed the status of ongoing projects within the District, as well as future projects to be completed within the District.

On May 14th, Sara Schmieg and Christa Lash presented on the The Independence Village Water Supply Project. The project is under the Community Engineering Corps (CEC) and the purpose of it is to complete a study of the existing Independence Village community water supply and distribution system, conduct an continued on page 9

ASCE-NCS Newsletter Patrons



Wiss, Janney, Elstner Associates, Inc.



alternatives analysis, and provide engineering recommendations for the upgrade of the system. Sara and Christa highlighted the engineering services provided by the EWB NOVA Chapter to identify alternatives and assess the cost, constructability, and regulatory requirements for the alternatives for the system upgrades.

Also on May 14th, Michael Sanio,
Director of Sustainability and
International Alliances at ASCE, presented on Transforming Engineering
Practice, ASCE's Sustainability
Roadmap. Michael is responsible for the society's sustainability program globally. ASCE's Sustainability Roadmap
provides guidance to practicing civil engineers for addressing changing



environmental, social and economic conditions ethically and responsibly.

ASCE NCS Education Committee (Collegiate)

By Jameelah M. Ingram, P.E., M. ASCE with content compiled from written interview responses by 1) Keith Foxx, P.E., PMP, CCM 2) Jose Mario Leon and 3) Kathy Poole, P.E., CCM

ASCE NCS Student Jose Mario Leon Connects Beyond the Classroom. Class ended late in the afternoon for Jose Mario Leon, a Civil Engineering Major at the University of the District of Columbia (UDC). Nevertheless, Jose was determined to attend the ASCE National Capital Section (NCS) Coffee + Connections event before it concluded - even if it meant arriving later. The springtime event was an opportunity for civil engineering students and professionals to network outside of a formal, career fair environment. Jose entered just in time to meet Keith Foxx, P.E., PMP, CCM, as Keith was headed for the exit. Keith is a Manager in Transportation of the Washington, DC office of RK&K, where his role is to manage and grow the highway design group and the construction management group. Jose's encounter with Keith resulted in lessons learned



Jose Leon, College Intern at the RK&K DC Office, at the East Capitol Street Bridge Project Site

beyond the classroom and even altered his outlook on his civil engineering career.

As Jose spoke with Keith, he inquired about internship opportunities. Although Keith was excited to engage with student chapters and share advice that evening, he had no intentions of hiring interns. Even so, Keith provided Jose with his business card and offered to share feedback on his resume. That way, the resume would be ready for whenever Jose sought employment. When Jose arrived home that night, he wasted no time. He immediately emailed his resume to Keith for review, fully aware that the exchange would not necessarily end with an offer letter in return, and Keith acknowledged receipt. Two weeks passed, and Jose had not received feedback yet. With the understanding that a manager's schedule is demanding, Jose politely followed up with Keith and maintained communication. Shortly after, Keith responded with valuable feedback. After this exchange, a couple of months elapsed. Jose's semester also came to a close as he continued his quest to find engineering experience. This is when Jose finally received the call from Keith he hoped



(Left to Right) Kathy Poole, PE, CCM, Jon Curtis, Jose Leon, and Getinet Aga at the East Capitol Street Bridge Project Field Office

for. Jose's persistence was imprinted on Keith's mind. So, when an internship opportunity arose, Keith knew exactly who to reach out to.

Jose started his summer internship in the RK&K DC office and was matched with Kathy Poole, P.E., CCM as his mentor. She is a Construction Manager who acts as the owner's representative on site and provides Construction Engineering and Inspection services for multiple clients on transportation construction projects. The primary goal of the internship program is to train and mentor talented students, familiarize them with the RK&K culture, and eventually hire them as full-time employees upon graduation. Through Kathy, Jose gained an abundance of technical knowledge. He learned the pros and cons of various types of project delivery methods; the numerous documentation filed by contractors and construction managers such as submittals, requests for information (RFIs) and change orders; how to transfer data from the inspector's daily report into



Jose Leon, College Intern, presents at the RK&K DC office

the client's field book for payment; and how to use an engineer's scale and read stations on plans. Jose also completed a 10-hour Occupational Safety and Health Administration (OSHA) training course. After the training, he visited the field to observe storm drain installation, excavation, steel escalation, woodwork, concrete pouring, demolition of concrete, and electrical work. He even assisted inspectors with concrete testing. At school, Jose's coursework focuses heavily on civil engineering theories and design. Now, with lessons learned from his internship, he understands how technical knowledge is applied practically.

This summer, Jose learned plenty of hard skills. However, the most important lessons he absorbed were soft skills.

continued on page 10

Upcoming Events (Also available on the NCS website under the Events tab.)

September 9

Reston Branch Meeting – Michael C. Loulakis, Esq., DBIA – Delivering Capital Projects: What are the Current Trends?, ASCE Headquarters, from 12 PM to 1 PM.

September 10

Buildingclean.org Webinar – This one-hour (1 to 2 PM) webinar looks at sourcing locally manufactured energy efficent products eligible for 1 AIA LU. Click here to register.

September 17

Young Member Forum Planning Meeting – Register now to join the YMF for board elections and yearly event planning. Ragtime Arlington from 6 to 9 PM.

September 23-25

GeoVirginia Conference 2019 – Smithfield, VA, Register now! For more details, including lodging information, click here. Keynote speaker: Dr. John Schmertmann.



October 15

October Dinner Meeting – Save the date for the next meeting about the United Nations Sustainable Development Goals in the Hilton Arlington at 6 PM.

ASCE-NCS Committee and Branch News and Updates

continued from page 9

He learned the value of confidence and building relationships. After several weeks on the job, Jose explained that "an Engineer in the field of construction will be looked up to for many reasons. They have to be prepared in many aspects to ensure all people involved in the project, complete the project. Furthermore, many of the relationships built within a project and how contractors perceive you, determines if the project is built smoothly, or it never gets completed." Kathy guided Jose throughout the summer and advised Jose that "despite the technical nature of the construction industry, the success or failure of our projects and business is heavily dependent upon relationships. i.e. relationships with our clients, contractors, other firms, project stakeholders, and our own employees." Through mentoring Jose, Kathy had a takeaway as well. She learned that "the best ideas can come from our youngest engineers!"

The ASCE NCS Coffee + Connections event centered on forging relationships, and Jose's first encounter with Keith led to an enriching summer internship. During the fall, he will serve as the Vice President of the UDC ASCE Student Chapter. When Jose graduates with the Class of 2020 next year, his goal is

"to become a great engineer and help design and build the structures of the cities of the future." Keith, Kathy, and the RK&K team introduced the nuances of Construction Management to Jose throughout the summer, which was all new to him. Because of this internship, Jose expressed that he "was able to see many more doors that can help (him) reach that goal."

Corporate Relations CommitteeBy Lynn Mayo

We want to give a big thanks to our current sponsors:

- Sheladia Associates (Gold),
- WSP (Gold),
- WJE (Silver), and
- MK Consulting Engineers, LLC (Bronze).

These companies are showing that they are industry leaders and they support the civil engineering profession. Through their generous sponsorships, ASCE-NCS can provide additional opportunities to carry-out our educational and professional mission.

If your company is not currently a sponsor, please consider becoming an ASCE-NCS sponsor. Being a sponsor increases awareness and visibility of your company to potential clients, teaming partners, and staff.

Platinum and Gold Sponsors have the opportunity to exhibit and make an announcement at a Section meeting. All sponsors will be recognized at the annual awards program and have a business card recognition in the eNewsletter for one year. For a complete list of benefits of being a sponsor, see [insert link to website that isn't up yet].

Our section meetings attract some of the best civil engineers in the DC area. Attendance typically includes about 20% from federal or local government, 20% from universities, and 60% from industry, including many from the nation's largest firms. Our eNewsletters are issued throughout the year and are distributed to more than 8,000 local engineers.

Support the civil engineering industry and ASCE-NCS and become a sponsor today. If you have any questions, please contact Lynn Mayo at Lynn@RePicture.com.

Employment Clearinghouse

The NCS provides the Employment Clearinghouse as a free service to its membership. The Clearinghouse allows members to post short notices for available positions or candidates seeking employment. All employers listed herein are equal opportunity employers. If you have questions, are seeking employment or would like to post a position please contact the <u>newsletter editor</u> and visit our jobs page.