

## ASCE NCS Awards Banquet

Save the Date! Join us at the Hilton Arlington on the evening of Tuesday, April 11th for the ASCE-NCS signature event of the year: the 2023 Awards Banquet! [Click here to register!](#)

The ASCE NCS Awards Banquet is scheduled for Tuesday, April 11th from 5 PM to 9 PM at the Hilton Arlington located at 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.

This annual event gives us an opportunity to recognize and celebrate local

## Save the Date

excellence in projects, engineers, and students who have contributed to our profession and our community. Recognized parties will include the ASCE-NCS 2023 Outstanding Civil Engineering Project, the Sustainability Committee's Award Winning Project, Meritorious Service and Community Service Award winners, NCS Student Scholarship Award recipients, Outstanding Graduating Seniors from local civil engineering universities, and members of the NCS who have achieved Life Member or Distinguished Member status during the past year.

Sponsorship opportunities are available to support the Banquet and other NCS activities. For additional information, please contact Elizabeth Wheeler at [president@asce-ncs.org](mailto:president@asce-ncs.org). ■



## February Section Meeting Recap

### The Jefferson Stone, The Naval Observatory, and America's Prime Meridian

Steve Pennington, Senior Manager with Geo Instruments, Inc. (an affiliate of Keller North America) presented on the Jefferson Stone, the Naval Observatory, and America's Prime Meridian on February 21st at the February ASCE NCS Section Dinner Meeting. The audience learned why the establishment of a prime meridian was so important for the United States and how it affected our



measurements of latitude and longitude, as early as the Lewis and Clark Expedition. This presentation examined the origins of an American Prime Meridian with Jefferson's early efforts in the District of Columbia, and the Navy with the establishment of a national observatory, all of which culminated with the U.S. Public Land Survey. ■

## President's Corner

Happy Spring, National Capital Section! March marks the halfway point of my presidency with the Section, and I cannot believe how fast these last 6 months have gone. I'm excited to share with you some of the recent activities I've been involved with for ASCE.



and (2) help the NCS get more involved in local community service activities. If you or anyone you know may be interested in being nominated for this role, please feel free to reach out to me at my contact information provided below.

Second, I'm glad to report that since my trip to the 2023 MRLC in January, I have felt more involved with ASCE National as a whole. I have kept in contact with not only other ASCE leaders throughout the country, but I

have also been more in contact with our Region 2 representatives. One tool that the Region uses is hosting a regularly-scheduled "Leadership Chat", which is held via Zoom. The meeting is a great platform for Section and Branch leaders from our Region to ask questions, discuss current challenges, celebrate accomplishments, and review upcoming events. I've found this platform to be very helpful, especially for learning more about what other leaders are doing to keep members engaged and involved with their Sections.

First, I had the pleasure of attending the Washington DC Engineers Week 2023 Awards Banquet that was held by the DC Council of Engineering and Architectural Societies (DCCEAS). I was joined by the NCS Younger Member Forum President, Ms. Hala Abdo, and our guests. For those of you who are unfamiliar with DCCEAS, the goal of the council is to help technically-related organizations in the DC metro area support public service efforts through technical education and community leadership. At the event, I met local leaders from all branches of architecture and engineering, including professors from Howard University and the University of DC, both of which have student chapters within our Section. One new goal that I now have for my tenure as NCS President is to nominate a NCS representative to sit on the DCCEAS board so we as a Section can play a more active role in the organization. I think this would be a great way to (1) help promote Civil Engineering as a whole



ASCE NCS YMF President, Hala Abdo (left) and ASCE NCS President, Elizabeth Wheeler (right), at the 2023 DCCEAS Awards Banquet on February 25, 2023.

Last, please join us for the 2023 ASCE NCS Awards Banquet, which is scheduled for Tuesday, April 11 at the Hilton Arlington. We will be awarding scholarships to various students from the local Student Chapters as well as recognizing several of our hard-working members for all of their time and effort they have devoted to the Section. Hopefully you can join us!

As always, if you are interested in getting more involved with the Section, please feel free to reach out to me at [president@asce-ncs.org](mailto:president@asce-ncs.org).

Sincerely,



Elizabeth M. Wheeler, P.E., M. ASCE  
ASCE NCS President

## Newsletter

**Maria Raggousis, Editor**

**May 2023 Issue Deadline:** April 21, 2023

**To Submit Articles:** [newsletter@asce-ncs.org](mailto:newsletter@asce-ncs.org)

**NCS eNewsletter Archives:** go to [www.asce-ncs.org](http://www.asce-ncs.org) and view along the sidebar.

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

## National Capital Section

### Officers (2022–2023)

**Elizabeth Wheeler, P.E.**, President

**Jameelah Muhammad Ingram, P.E.**, Past President

**Kelly Cronin, P.E.**, Previous Past President

**Tricia E. Wolfbauer**, Vice President

**Joseph Whartenby Jr., P.E.**, Treasurer

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**Lisa Anderson, P.E.**, Director

**Shainur Ahsan, P.E.**, Director

**Stephen P. Barna, P.E.**, Director

**Ardalan Mosavi, Ph.D., P.E.**, Director

**Maria Raggousis, P.E.**, Director (Newsletter Editor)

**Hala Abdo, E.I.T.**, YMF President

**Christopher Friend, P.E.**, Reston Branch President

### Committee Chairs

Please refer to the [NCS website](http://www.asce-ncs.org) for a current list of NCS committees and chairs.

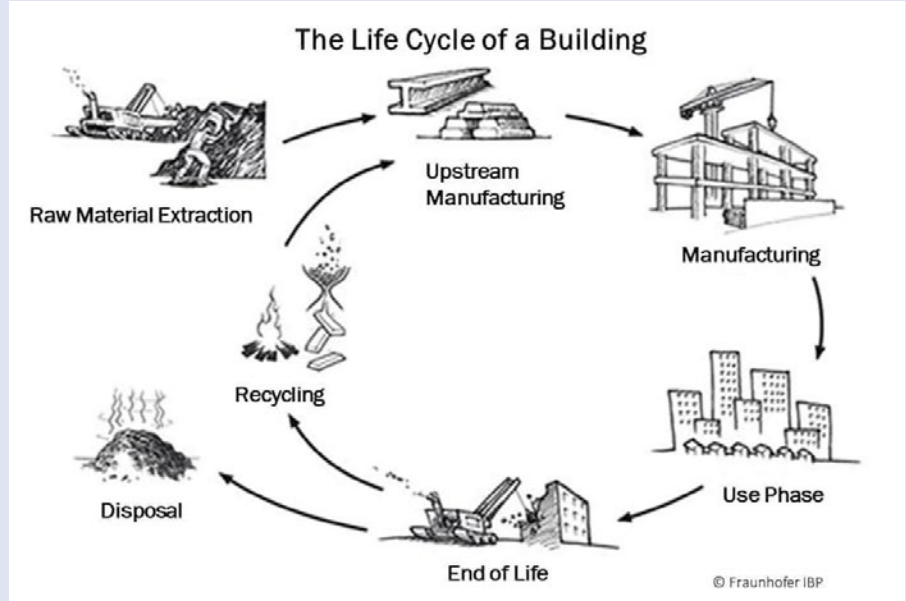
# Collaborations to Grow a Life-cycle-based Perspective for the Sustainability and Resilience of the Built Environment

## Introduction

The construction of civil infrastructures is known to have a significant impact on their surrounding environments, primarily because of energy consumption, waste generation, and greenhouse gas emission. Therefore, achieving life-cycle sustainability and resilience of the built environment has become a critical area of research in need of collaborative efforts. This article explores the importance of this research domain, current challenges and opportunities, and a proposed collaboration between Norway and the USA to move toward a sustainable and resilient built environment.

## Current Challenges and Opportunities

The construction sector faces several challenges that need to be addressed to achieve sustainable and resilient structures. One of the primary challenges is the limited availability of sustainable construction materials and the high costs associated with their use. This creates challenges for the construction industry to adopt sustainable practices, despite the growing demand for sustainable buildings and bridges. Another challenge is short-term planning and a lack of focus on long-term benefits of sustainability and resilience. Furthermore, there is limited awareness and understanding of life-cycle assessment (LCA) and its importance in the design and construction of civil infrastructures. This makes it difficult for various stakeholders to identify optimal options for



materials and products that can reduce the overall environmental impact. In addition, the issues associated with balancing sustainability and resiliency goals with economic considerations pose challenges beyond those that had to be resolved in conventional LCAs. The relatively high cost of sustainable materials and technologies, coupled with the pressure to deliver projects on time and within budget, can make it challenging to prioritize sustainability and resiliency goals in the construction process.

However, these challenges also present opportunities for the sector to adopt more sustainable and resilient practices. The growing demand for

sustainable buildings and bridges is driving the development of new materials and technologies that can reduce the environmental impact of construction activities. For instance, renewable energy sources, such as solar and wind power, or new technologies, such as 3D printing in construction sites, can significantly reduce greenhouse gas emissions. LCA enables a comprehensive analysis of the environmental impact of construction materials and products throughout their entire life cycle, from material production to disposal/reuse. In addition, increased collaboration and knowledge-sharing among different stakeholders in the public and private sectors can foster

*continued on page 4*

## ASCE-NCS Newsletter Patrons





innovations leading to sustainable and resilient solutions.

### **Collaborations between Norway and the USA**

To address the current challenges in achieving sustainable and resilient structures, a collaboration between Oslo Metropolitan University (OsloMet) in Norway and Iowa State University (ISU) in the USA has been initiated through a project entitled "TRANSFORM – Advanced Materials and Technologies for Sustainable and Resilient Structures: Global Solutions through Adaptable Educational Modules," sponsored by the Norwegian Directorate for Higher Education and Skills (HK-dir). This collaboration aims to provide a formal framework between OsloMet and ISU, enabling them to contribute to enhancing sustainability and resilience, including a diverse range of experts and target groups.

The OsloMet team members are working on research projects in structural engineering, innovative building materials, and sustainable design. These projects focus on improving the knowledge of advanced materials, such as mass timber, ultra-high performance concrete, and high-strength steel in the sustainable design of structures. In parallel, the ISU team members are working on research projects that target innovative solutions at both material and structural levels for transforming not only the safety but

also the sustainability and resilience of civil infrastructures. The ultimate goal is to pave the way for a suite of collaborative efforts on the research and educational topics of mutual interest with the ultimate goal of training a new generation of engineers.

The collaboration will establish an international education program to facilitate the exchange of state-of-the-art knowledge and practice on advanced materials and technologies for building new and rehabilitating existing structures. The immediate target groups are Master and Ph.D. students from OsloMet and ISU, while the developed open course modules will help involve graduate students from other universities in both countries. The academic and administrative staff, including individuals with engineering and education backgrounds, are the second most important target group, as the proposed project will pursue a "train the trainer" approach. Industry partners form an invaluable component of this international effort to provide career development and coaching opportunities for the involved students with the potential for future job placements. Finally, this collaboration will promote the transfer of social, scientific, and professional values between the target groups in Norway and the USA.

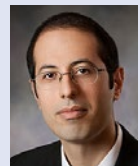
### **About the Authors**

Dr. Mahdi Kioumarsi is an Associate Professor in the Department of

Built Environment at OsloMet – Oslo Metropolitan University and the Department of Engineering at Østfold University in Norway. Additionally, he is head of the Research and Development of the Structural Engineering Laboratory at OsloMet. Throughout his academic career, Dr. Kioumarsi has researched concrete structures, covering both large-scale (complete buildings) and small-scale (material level) projects. His research approach involves a combination of numerical modeling, soft computing methods, and experimental work.



Dr. Behrouz Shafei is an Associate Professor in the Department of Civil, Construction, and Environmental Engineering with a courtesy appointment in the Department of Materials Science and Engineering at Iowa State University. Dr. Shafei has worked on several research projects related to the design and assessment of structures subjected to natural and manmade hazards, in addition to the development of condition-based strategies for the inspection and maintenance of aging structural components. His research activities span laboratory experiments, numerical simulations, and field investigations.



## ASCE NCS Project of the Year Nominations

During the upcoming ASCE National Capital Section Annual Section Award event, NCS will honor outstanding Civil Engineering Project of the Year Award winner. Please find a description of the award below:

**Civil Engineering Project of the Year** – The Civil Engineering Project of the Year Award recognizes a civil engineering project within the National Capital region that demonstrates the

greatest civil engineering skills and represents the greatest contribution to civil engineering progress. The project must have been substantially completed within the preceding three years. The Awards and Nominations Committee considers the contribution to the well-being of individuals, the resourcefulness in planning, the solution of design problems, the pioneering use of materials and methods, innovations in construction, impact on the physical

environment, unusual aspects, and aesthetic values. If you have a project, or know of a project, that you think should be nominated, please let us know; we love to highlight local engineers and their projects and would love to hear from you.

Please contact ASCE NCS President, Elizabeth Wheeler, P.E. ([president@asce-ncs.org](mailto:president@asce-ncs.org)) for a copy of the Nomination Forms. ■

## NCS Members Attend 2023 ASCE Legislative Fly-In Event

During the first week of March, members of the National Capital Section, Virginia Section, and Maryland Section joined with hundreds of fellow ASCE members from across the country for the 2023 ASCE Legislative Fly-in. Members heard about key issues such as the need to reauthorize the National Dam Safety Program and FAA which both have funding expiring in September 2023. Another priority was to incorporate policies to design infrastructure with increased resiliency against man-made and natural hazards. Members heard from the Administrator Bhatt of the Federal Highway Administration, Commissioner Touton of the U.S. Bureau of Reclamation, and a panel of State Department of Transportation Secretaries as they gave remarks on infrastructure investment, future needs, and the impacts of the Infrastructure Investment and Jobs Act. After a series of planning meetings, the delegations from each state descended upon Capitol Hill to meet with the offices of their respective Congressional members.

Members of the ASCE Virginia Section and National Capital Section met with Jahnavi Patel, Legislative Correspondent for Senator Tim Kaine (D) [VA]; Taylor Durbin, Legislative Correspondent for Senator Mark Warner (D) [VA]; Chris Gibson, Legislative Director for Rep. Jennifer Wexton (D) [VA]; Samuel Wojcicki, Legislative Director for Rep. Abigail Spanberger (D) [VA], and others. Below are the accounts from a few of the attendees:

*“DC and VA Members met with Jahnavi Patel, Legislative Correspondent for Senator Tim Kaine (D) [VA], during the 2023 ASCE Fly-In. At the meeting, we provided feedback on appropriations as Congress continues to work toward implementation of the Bipartisan Infrastructure Law. The team shared ASCE’s 118th Congress Legislative*



Pictured Left to Right: Tom Decker, Victor Crawford, Caleb Hurst, Shainur Ahsan, Chris Stone, Darren Williams, Alireza Ermagun, and Crystal Mena at Fly-In Welcome Reception.

*Priorities; Issue briefs for the National Dam Safety Program, Federal Aviation Administration Reauthorization, and Resilient Infrastructure; and the 2022 Virginia Section Report Card. We are thankful to Ms. Patel and the office of Senator Tim Kaine for the time spent and to ASCE for organizing Advocacy Day on Capitol Hill!”*

*– Jameelah Mohammad Ingram, PE, M.ASCE, Lead Structural Engineer and Deputy Project Manager, WSP USA*

*“On behalf of the Virginia Section, I want to thank Shainur Ahsan and the other National Capital Section Members for their support in the development and release of the 2022 Virginia Report Card. As a result of their support, the 2022 Report Card for Virginia Infrastructure was used as a valuable tool for discussing the infrastructure concerns for Virginia with Congressional Members and their staff during the recent Fly-In. ”*

*– Victor I. Crawford, PE, M.ASCE Chair, Release Committee for the 2022 Virginia Report Card*

To start getting involved in Government Relations, be sure to sign up to be a Key Contact to be informed on federal and local legislative actions. Sign up at



Pictured Left to Right: Rex Holmlin, Jameelah Muhammad Ingram, and Tom Decker at the Russell Rotunda in the Russell Senate Office Building. Photo Credit: Lindsay O’ Leary. (Meeting attendees not pictured: Alireza Ermagun, Lindsay O’Leary, Crystal Mena, and Chris Stone.)

<https://www.asce.org/advocacy/key-contacts>. For those interested in attending a future Fly-In event, applications open in the Fall each year. ■

## ASCE NCS SEI – Call for Committee Board Members

We are excited to announce that the ASCE NCS Structural Engineering Institute (SEI) is in the planning stages to re-start an active SEI committee! We are looking for new board members to

help plan monthly presentations and events. To balance the current board profile which is focused on vertical building structures, we are looking for those passionate about structures in the

transportation and infrastructure fields to expand our technical expertise and interests. If interested, please contact [Ardalan Mosavi](#) and [Gillian Love](#). ■

## How Not to Be Phished

Simple tips to help you stay safe against phishing attacks that can cost you dearly.

By Ranjit Sahai, PE, F.ASCE (in collaboration with Bing's generative chat)

Phishing is a type of cyber-attack where a hacker sends an email or message that appears to be from a legitimate source, such as a bank or a social media site, in order to trick the recipient into giving away sensitive information like passwords, credit card numbers, or social security numbers.

Phishing is a very common type of cyber-attack, with 1 in every 99 emails being a phishing attempt in 2019<sup>1</sup>.

In fact, phishing is the most prevalent threat in the US, with 323,972 victims in 2022, up 34% compared to the previous year<sup>2</sup>.

The monetary impact of phishing is also significant, with imposter scams accounting for more than \$2.3 billion of losses reported last year, up from \$1.2 billion in 2020<sup>3</sup>.

So, how can you avoid being phished?

Here are some tips to help you stay safe:

- 1** Know what a phishing scam looks like: Phishing emails often look like they are from a legitimate source, but there are usually some telltale signs that they are not. For example, the email may contain spelling or grammar errors, or it may ask you to click on a link or download an attachment.
- 2** Don't click on that link: If you receive an email that asks you to click on a link, don't do it! Instead, hover your mouse over the link to see where it leads. If it looks suspicious, don't click on it.
- 3** Get free anti-phishing add-ons: Many web browsers offer free anti-phishing add-ons that can help protect you from phishing attacks. These add-ons will usually warn you if you are about to visit a known phishing site.
- 4** Don't give your information to an unsecured site: If you are asked to enter sensitive information like your



Image source: Bigstockphoto.com

credit card number or social security number, make sure that the site is secure. Look for the padlock icon in the address bar, and make sure that the URL starts with "https" instead of "http".

- 5** Rotate passwords regularly: It's a good idea to change your passwords regularly, especially for sites that contain sensitive information. This can help prevent hackers from gaining access to your accounts.
- 6** Don't ignore those updates: Software updates often contain security patches that can help protect you from cyber attacks. Make sure that you keep your software up to date, and don't ignore those annoying update notifications!
- 7** Install firewalls: Firewalls can help protect your computer from cyber attacks by blocking unauthorized access to your network. Make sure that you have a firewall installed on your computer, and that it is turned on.
- 8** Don't be tempted by those pop-ups: Pop-ups can be annoying, but they can also be dangerous. If you see a pop-up that asks you to download something or enter your information, don't do it!

**9** Use multi-factor authentication: Multi-factor authentication is a security feature that requires you to enter a code in addition to your password. This can help prevent hackers from gaining access to your accounts.

**10** Stay informed: New phishing scams are being developed all the time, so it's important to stay informed about the latest threats. Make sure that you keep up to date with the latest news and trends in cyber security.

I hope these tips help you stay safe from phishing attacks. Remember, the best defense against phishing is to be vigilant and to always think before you click!

### About the Author

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.





## 2023 ASCE Region 2 Awards

**Nominations for the 2023 awards have opened! Applications are due by April 1st, 2023.**

Please download the appropriate nomination document below, and email the required documentation to [ASCERegion2@gmail.com](mailto:ASCERegion2@gmail.com). Make sure to include the correct subject for the award!

The Award Categories include:

- Lifetime Achievement Award
- Outstanding Student Member Award
- Outstanding Diversity and Inclusion Award
- Outstanding Faculty/Practitioner Advisor Award
- Outstanding Younger Member Award

To download the nomination forms and for more information, visit the awards website: <https://regions.asce.org/region2/awards>. ■

## ASCE NCS Committee Volunteering Opportunities and Leadership Roles

In addition to the Board positions, we also have other opportunities to take on leadership roles and become more active with NCS. The following roles are not elected positions. These leadership roles are great opportunities to take a stake in ASCE's local presence and activities.

If you are interested or would like more information, please email [nominations@asce-ncs.org](mailto:nominations@asce-ncs.org) or [president@asce-ncs.org](mailto:president@asce-ncs.org).

### Treasurer-In-Training

The Treasurer-In-Training works with the current Treasurer to learn their responsibilities and role with the intention (but no obligation) of becoming the Treasurer once the current Treasurer's term has ended. The Treasurer shall attend meetings of the Board. The Treasurer shall be responsible for the maintenance and disbursement of all funds. The Treasurer shall prepare reports on the financial condition of the Section monthly or at a frequency requested by the President, and shall maintain the membership roster, authenticating all paid dues with the Society. The Treasurer shall assist in preparation of the Section's annual budget and be responsible for submission of the Section's annual tax return.

Each Treasurer shall serve a two (2)-year term; the Treasurer-In-Training shall serve a one (1)-year term during the current Treasurer's second term.

### Newsletter Editor

The Newsletter Editor is responsible for issuing calls for articles, assembling and editing articles, coordinating publication, and issuance of each newsletter. The Newsletter Editor is considered a Director on the Board. Each Newsletter Editor shall serve a two (2)-year term and is eligible for re-election.

### Committees

NCS has over twenty committees. All committees are open to members who are interested in taking a leadership role. Committees include the Architectural Engineering Institute; Annual Awards Banquet Committee; Boundary Stone Committee; By-law Committee; Communications Committee; Construction Committee; Corporate Relations Committee; Education Committee; Environmental & Water Resources Institute; Engineers Week Committee; Geo-Institute; History and Heritage Committee; Life Members Forum; Management & Best Practices

Committee; Newsletter Editor; Report Card Committee; Reston Branch; Section Meeting Planning; Structural Committee; Sustainability Committee; Transportation Committee; Younger Member Forum; and Webmaster.

The Sustainability Committee and Structural Committee are both seeking Chairs. The Communications Committee is seeking a volunteer to assist with social media for the ASCE National Capital Section.

### Volunteering

We have opportunities to take on leadership roles and become more active with NCS. We are always looking for volunteers to champion section meetings, participate in STEM events, plan a social event, host a tour, etc.

### Appointments

There are opportunities to serve as a Practitioner Advisor at universities within NCS, upon authorization by the Board of Directors and recommendation of the Faculty Advisor. A Practitioner Advisor should support the Faculty Advisor and be an example of high-caliber professional performance to students. Contact [nominations@asce-ncs.org](mailto:nominations@asce-ncs.org) for details and requirements. ■



## 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 [newsletter editor](#).*

# ASCE-NCS Committee and Branch News and Updates

## Architectural Engineering Institute

The Architectural Engineering Institute (AEI) DC Committee, in collaboration with BR+A Consulting Engineers, the Mechanical Engineer for the project, hopes you join us for a presentation on of the new medical/surgical pavilion at MedStar Georgetown University Hospital, which is nearing the end of construction by general contractor Clark Construction. This state-of-the-art facility is designed by a joint venture between HKS Architects and Shalom Baranes Associates. Watch your inbox for more information!



The new Medical/Surgical Pavilion is targeting LEED Silver certification and contains over 450,000 sq. ft and will feature 156 private patient rooms, a rooftop helipad with direct access to 31 operating rooms, and 32 exam rooms in a modernized emergency department. The building is situated over a new 600-car below-grade parking garage.



## Younger Members Forum

**Monthly Happy Hours:** The NCS Younger Members Forum (YMF) holds monthly happy hours, alternating between Arlington, VA and Washington, DC. Happy hours are usually the first Wednesday of each month unless a holiday falls during that week.

**Professional Development:** Please share suggestions of any professional development activities you would like us to organize in the future. Call to students – if you would like to learn more about the ASCE NCS Younger Members Forum, let us know and we will come speak to your local ASCE chapter!

## Scholarship Opportunities:

■ [Latina Engineer | Diana Iracheta Foundation](#), in collaboration with [GE Appliances](#), is offering scholarships in the spring. You can learn about all the requirements and apply here: [https://lnkd.in/g/kJ2\\_6Za](https://lnkd.in/g/kJ2_6Za).

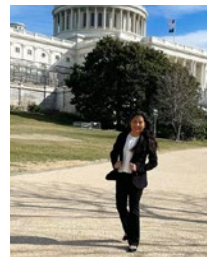


**News & Announcements:** We are proud to share the following announcement from members of our YMF committee:

■ Emily Kim, PE has been appointed as the ASCE NCS Section Meeting Coordinator!



■ Crystal Mena Boado, PE joined the legislative fly-in held in the first week of March along with ASCE representatives from all over the country!



■ Kush Vashee, PE was recently honored as the very first recipient of the Next Generation award from ACEC Virginia and attended the Future City Competition Finals as a judge during Engineers Week on February 20th.



■ Joy Wang, PE recently obtained her first professional engineering license and achieved a new milestone in her career!



■ Hala Abdo, EIT, 2023 President of ASCE NCS YMF has had a busy year so far! She recently presented on “LinkedIn, Resume, and Professional Branding” in collaboration with the ASCE NCS YMF and the ASCE University of Jordan Student Chapter and participated in a panel event at the Muslim American Society in Alexandria. Hala was also nominated by the NCS for the Young Engineer of the Year award during the National Engineers Week Awards Dinner of District of Columbia Council of Engineering and Architectural Societies (DCCEAS).



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■ Shofiq Ahmed, PE was honored as a 2023 ASCE New Face of Civil Engineering. He recently relocated from West Virginia to the National Capital Area; get to know him through this [article!](#)



**Stay Connected!** Check out photos and stay up-to-date with YMF events by visiting the new YMF Facebook page (ASCE National Capital Section Younger Members Forum), following us on Twitter (@ASCE\_NCS\_YMF), LinkedIn (ASCE National Capital YMF), and Instagram (@asce\_ncs\_ymf). If you would like to join the ASCE NCS YMF email list, please email [ncsymfpresident@gmail.com](mailto:ncsymfpresident@gmail.com).

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

**Opportunities:** The group is looking for a new Social Activities Chair and for a new Communications/Social Media Chair. If you are interested please send an email to [ncsymfpresident@gmail.com](mailto:ncsymfpresident@gmail.com) with your interest. We hope to hear from you!

**YMLS Alumni Summit Overview:** The ASCE Committee on Younger Members is to announce the 2023 Younger Member Leadership Symposium (YMLS) Alumni Summit is an advanced leadership and soft-skill training workshop exclusively offered to ASCE Younger Members who have

attended at least one in person YMLS event before. This weekend will include both networking and social opportunities as well as advanced training on topics such as personal development, leadership in the workplace, and people/project management.

This year's YMLS Alumni Summit will be held in person in Las Vegas, NV on April 21–23. The weekend will kick off with a networking social event on Friday night with the local Las Vegas Younger Member Forum (YMF) to allow attendees to connect. On Saturday, the Summit will jump into a full day workshop, networking and an evening social event. The workshop will conclude on Sunday morning by around noon, allowing for travel later in the day on Sunday.

**Attendance Eligibility Note:** Please note that to be eligible for this event, you must be an active ASCE younger member in good standing and have attended YMLS at ASCE Headquarters (Reston, VA) in 2019 or earlier, or attended one of the three YMC+ events held in 2022 (Hartford, CT, Park City, UT, or Austin, TX). If you only attended the virtual YMLS event in 2021, you are not eligible to attend as the content covered in the abbreviated virtual format did not cover the same range of topics as an in person YMLS. Alumni Summit attendees are required to have participated in the same core YMLS sessions. Any registrants that are found to be ineligible will be canceled and refunded. If you are not currently eligible but still interested, please keep an eye out for this year's YMLS which is scheduled for August 18–20 at ASCE Headquarters.

### Reston Branch

By Michael J. Magyarics, P.E., M. ASCE, Reston Branch Vice President

On February 7 the Reston Branch hosted Joshua D. Valentino, PG, PhD, Project Geologist and Karst Geologist at Terracon in Ashburn, VA, for his presentation entitled, "Karst Surveys for Construction Projects." Similar to January, this luncheon meeting was a fully in-person event at ASCE Headquarters (1801 Alexander Bell Dr, Reston, VA 20191). His presentation discussed how construction in karst terrains can present a challenge to development, and how the industry has become increasingly aware of the impact, both to the site infrastructure and to human health and the environment, that may result

from mismanagement of construction activities. These impacts include development of new karst features or acceleration of existing features, short term and long term damage to water supply wells from nearby homeowners, and the potential to negatively impact federally listed endangered species. To address these concerns, he and his colleagues developed a karst survey protocol specifically designed for the assessment of karst impact and risk at proposed construction sites, which is comprised of 1) desktop data review, 2) subsequent field reconnaissance to verify features, and 3) risk assessment determined per karst feature through a parsimony analysis consisting of five karst feature coded variables. Examples of karst feature protection and remediation, geophysical investigations, and karst aquifer characterization were summarized through case studies during the presentation.

Joshua D. Valentino has been an avid caver since the age of 5 years old and grew up in a household full of geologists where his father, mother, and brother all have advanced geology degrees. This led to his interest in geology from an early age. He received his bachelor's degree in Geology from the State University of New York in Oswego, NY in 2011. He received his Doctor of Philosophy degree specializing in tectonics, geochronology, and glaciology at Virginia Tech in Blacksburg, VA in 2017. He is currently a Professional Geologist (PG) working as a project geologist and karst geologist with Terracon, located in Ashburn, VA. His specialties include engineering geology, ArcGIS management and modeling, hydrogeology, and karst characterization, remediation and management.

On March 21 the Reston Branch will host several speakers who will provide an overview of the 2022 Virginia Infrastructure Report Card, which the ASCE

Virginia Section released in December of last year in front of the Lesner Bridge in Virginia Beach. Speakers include: Gordon Chaffin, Senior Manager of Infrastructure Initiatives at ASCE, Washington, D.C., Ward 5, Edgewood;



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Victor. I. Crawford, PE, M.ASCE (retired); Michael C. Brown, PhD, PE, Associate Principal, Wiss, Janney, Elstner Associates; and Shainur Ahsan, PE, Project Engineer, Whitman, Requardt and Associates. Because some of the speakers will be presenting virtually, this will be a hybrid meeting. Please note: for those that would like to attend the luncheon meeting in-person, it will be hosted at WSP's Herndon, VA, office at 13530 Dulles Technology Drive, in the 1st floor conference room.

The report card graded eleven categories of infrastructure with an overall 'C' grade and provided highlights of recent successes and recommendations to raise the grade. We will take a closer look at Bridges, Wastewater, and Rail and discuss activities related to the Legislative Fly-in earlier this month. Please join us as we discuss the development process of the report card and how it can be a powerful tool for civil engineers to discuss the importance of infrastructure investment to local, state, and federal leaders.

#### **About The Speakers:**

**Gordon Chaffin**, Senior Manager of Infrastructure Initiatives at ASCE, Washington, D.C., Ward 5, Edgewood, Gordon Chaffin joined the American Society of Civil Engineers after several years as a journalist covering infrastructure, housing, and local politics. He produces state infrastructure report cards at ASCE on that association's Public Relations and Government Relations team.



**Victor. I. Crawford**, PE, M.ASCE, Victor has previously spent 37 years working in the Navy and Department of Energy environmental and safety programs. His work ranged from starting a 160,000 gallon per day industrial wastewater treatment to leading Environmental Management Assessments at National Laboratories for the U.S. Department of Energy.



Upon retirement from the Federal government, Victor rejoined ASCE to repay the Profession that had been so fulfilling and rewarding throughout his career. He has been involved in volunteering activities including supporting Science Technology, Engineering, and Math (STEM) in schools. He is a member of the National Capital Section and has served as the K-12 Educational Committee Chair, the Chair of the 2016 Centennial Celebration Committee, and then as the Section's Treasurer.

He volunteered to reactivate the Bull Run Branch. And served as the first President of the Branch and currently serves as the Branch Treasurer. As a member of the Virginia Section, he also developed the Solid Waste portion of the Virginia Report Card and currently serves as the Chair of the Virginia Section's Centennial Celebration Committee and the Report Card Working Group.

Including his years at California State University, Chico, he has spent over 50 years becoming and then working as a civil engineer, or one half the time of the Virginia Section Centennial.

**Michael C. Brown**, PhD, PE, Associate Principal, Wiss, Janney, Elstner Associates, Michael consults on materials testing, nondestructive evaluation, structural condition assessment and monitoring, rehabilitation design, bridge management and preservation planning for all modes of transportation and commercial, residential, and institutional buildings. He specializes in bridge preservation with expertise in reinforced and prestressed concrete structures, corrosion assessment and mitigation. His experience includes 11 years in engineering consulting, 16 years in research, primarily with the Virginia Department of Transportation, and concurrent 12 years as visiting faculty and lecturer of civil engineering at the University of Virginia. Dr. Brown is a member of the American Society of Civil Engineering including its Structural Engineering Institute,



a member of the Board of Direction and Fellow of the American Concrete Institute, and chair or voting member on several American Concrete Institute, Transportation Research Board, and Federal Highway Administration technical committees or task groups. He prepared much of the Bridge chapter of the 2022 Virginia Infrastructure Report Card.

**Shainur Ahsan**, PE, Project Engineer, Whitman, Requardt and Associates,

Shainur has ten years of experience as a structural engineer working on various commercial, institutional, and industrial projects located all over the county. His experience at WRA includes new design, repairs, and rehabilitations of buildings, water, and other miscellaneous structures.



He previously worked on natural gas, nuclear, and telecommunications projects. He has been an active participant with ASCE at Auburn University, the National Capital Section, and the Reston Branch. He currently serves as the past-president of the Reston Branch, director of the National Capital Section, and has assisted the Virginia Section with the rail chapter of the 2022 Infrastructure Report Card.

**LinkedIn:** The Reston Branch has launched a group on LinkedIn to provide regular updates for the Branch as well as offer a place for branch members to connect. See the following link for additional information: <https://www.linkedin.com/groups/13759693/>.

**Upcoming Events:** March 21, 2023, at 12 PM – Hybrid (option for either in-person or virtual) Luncheon Meeting at WSP's Herndon, VA, office (13530 Dulles Technology Drive, 1st floor conference room) – Presentation on 2022 Virginia infrastructure Report Card. ■