

## **Nottoway Bridge Condition Assessment... and the Role of NDE in Decision Making**

The Nottoway Bridge is an existing bridge on Route 46 over the Nottoway River near Blackstone, Virginia. This case study reviews visual observations, NDE and SM results, materials testing, and bridge deck service life modeling. The assessment was part of a decision making process regarding the construction of a new bridge versus rehabilitating the old bridge. Part of this presentation will discuss various NDE techniques and how they can be used to help assess and manage similar assets.

### **About the Speaker**

Travis Green, PE is a Principal at Wiss, Janney, Elstner Associates, Inc. (WJE). Since joining WJE in 2000, Travis Green's experience has included structural investigations, evaluations, load tests, and repair designs for low – and high-rise commercial buildings and parking structures. His work has involved post-tensioned, precast, and conventionally reinforced



concrete structures; wood-framed, aluminum, and light-gauge metal structures; structural steel structures; pre-engineered buildings and building components; and concrete and brick masonry wall systems. Mr. Green's analytical work includes extensive use of computer models for research and analysis of new and existing structural systems.

Prior to joining WJE, Mr. Green worked for an architect, at a precast concrete plant, and as a research assistant at the University of California at Los Angeles. Travis obtained his BS in Architectural Engineering from the University of Kansas and his MS in Civil Engineering from Georgia Tech. He was awarded a year-long scholarship to study architecture at Heriot-Watt University in Edinburgh, Scotland. While a research assistant at the Georgia Institute of Technology, he performed large-scale experimental testing on partially restrained composite, beam-to-column connections. Mr. Green is a certified Bridge Construction Inspection Instructor. ■

Please join us on **Tuesday, November 29th** 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 6:45 pm, followed by dinner. The program will end by 8:30 pm. The cost is \$45 for those preregistering, \$10 for students and \$55 for walk-ins, as space allows. For questions, please contact [Elizabeth Wheeler](#). Please click [here](#) to register by **Friday, November 25th**.

*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 walk-ins is higher because the Section is charged accordingly by the hotel for late registrations.*



## President's Corner

Hello, National Capital Section! I'm thrilled to have been elected as this year's President, and I am looking forward to all that is in store over the next several months.



For those of you who I have yet to meet, my name is Elizabeth Wheeler and I am a Project Engineer with Mosaic Engineering and Consulting, a specialty engineering firm here in Northern Virginia. Originally from South Carolina, I attended Clemson University where I received my undergraduate and Master of Science in Civil Engineering with an emphasis in structures. I was introduced to ASCE when I joined Clemson's student chapter and served as Co-Captain of the Concrete Canoe Team during my Senior Year. There I made many fond memories, lifelong friends, and lasting industry connections. It was even through the ASCE Carolinas Conference that I met a network connection who helped me get my job at Mosaic Engineering.

When I moved to the NoVA area in 2016, I knew I was going to join the National Capital Section, as I believed it would be a great way to meet new people and help me grow as an engineer. I started off with the Younger Members Group going to

monthly happy hours, attending Yearly Planning Meetings, and assisting at the registration table for the Section's monthly meetings. As my time with the Section grew, so did my involvement.

Over the years, I met many NCS Board members who I considered mentors and who always gave me the opportunity to advance my participation with the Section. To them I want to say, "Thank You!" and let them know how much I have appreciated their trust and support throughout the past several years. I would not be here without their guidance and encouragement.

I'm excited to announce that we have officially returned to in-person meetings this year for dinner presentations at the Hilton Arlington. Throughout COVID, the Section did a fantastic job with turn-out and attendance at our virtual meetings, and I hope to keep that momentum moving forward. My goal is to use these dinner presentations as an opportunity to not only increase engagement, but also to enable more communication between our members, committees, and local student chapters. We have some exciting presentations lined up

for the 2022–2023 schedule, and I look forward to seeing y'all there!

Our first meeting was held on Tuesday, October 25. While I know the ASCE 2022 Convention was in progress at that time in Anaheim, California, I want to thank those of you who came out to the first meeting and helped get the year started off on a positive note. For those of you who attended the 2022 Convention, please feel free to share your experience with the Section, as I'm sure there were quite a number of fascinating topics and Professional Development opportunities that our members would be interested in learning about.

Once again, I want to thank the Section for its support, and I'm excited for this new adventure as the 2022–2023 ASCE NCS President.

Sincerely,

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

## Newsletter

**Maria Raggousis, Editor**

**January 2023 Issue Deadline:** December 3, 2022

**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)

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

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

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**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.

# October Section Meeting Recap

**From Mandate to Milestone: Implementing a Major CSO Program in 7 Years**  
**Presented by Kelvin Coles, P.E. & Isabella Evangelista, E.I.T.**

On Tuesday, October 25th, 2022, the ASCE National Capital Section held its first in person dinner meeting at the Hilton Arlington from our hiatus. Our presenters hit it out of the park describing the RiverRenew infrastructure program and our members were thrilled to be back together again.

RiverRenew is a major infrastructure program to address combined sewer overflows (CSOs) to Alexandria, VA's



waterways. RiverRenew is one of the most expeditious CSO programs in the United States – resulting from political pressures and a new law requiring the abatement of CSOs by July 2025. This presentation will focus on the technical solution – a storage/conveyance tunnel system designed to comply with strict regulatory requirements, the Program's design-build procurement approach to meet the aggressive schedule, and the selection of the right alternative

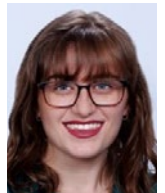
to meet the needs of the community and Alexandria, VA's unique political landscape.

### About the Speakers

Kelvin Coles, P.E., serves as the Deputy Design Manager for RiverRenew as part of the Owner's Advisor Team. He has over 13 years of experience planning, designing, and managing small – and large-scale civil and water resource infrastructure projects in urban environments. He is a Professional Engineer in the Commonwealth of Virginia and holds a Bachelor of Science in Civil Engineering and a Master of Engineering in Environmental Engineering from Old Dominion University.



Isabella Evangelista serves as a Project Engineer for RiverRenew as part of the Owner's Advisor Team. She has over 2 years of experience supporting the RiverRenew team with design and construction submittal reviews, project sustainability, and risk management. She is an EIT in the Commonwealth of Virginia and holds a Bachelor of Science in Civil Engineering from The George Washington University. ■



## ASCE-NCS Newsletter Patrons





# From Nearly Zero Energy Buildings to Zero Emission Buildings

## The Role of the Early Design Phase

During the last four decades, a lot of effort has been put worldwide into energy efficiency of buildings. The need for reducing energy consumption in building sector and gradually empowerment by renewable energy sources dates to the oil crisis in the 70's and has been increased lately by the discussion about climate change; in fact, the building sector is responsible for approximately 40% of the total energy use, 36% of total greenhouse gas (GHG) emissions and 40% of waste produced globally. The concept of 'Zero Energy Buildings' has dominated the debates in academic and professional fora. Furthermore, all member States of the European Union (EU) reached some 15 years

ago an historic agreement on 'ensuring that all new buildings were nearly zero-energy by the end of 2020 while all new public buildings had to be nearly zero-energy after 31 December 2018'. Norway, as part of the European Economic Area (EEA) has also followed the respective Directive 2010/31/EU of the European Parliament and of the Council on the energy performance of buildings. The addition of the word 'nearly', to make the goals easier and feasible, didn't reduce the size of the colossal effort. One of the reasons was the definition of 'Zero Energy Building', which has been challenging itself. As an example, the EU asked the member States to specify their national plans as well as the technical details of the regulations for energy efficiency in buildings.

### Measures for nearly Zero Energy Buildings

Highly insulated and airtight building envelopes, high performance windows, balanced mechanical ventilation with heat recovery, energy efficient lighting and appliances, solar panels for energy production have been the pillars on the road to reduction of energy use. Furthermore, passive strategies for heating or cooling, such as exploitation of thermal mass,



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natural ventilation due to wind and/or stack effect, as well as optimization of windows and building geometry with respect to daylighting and solar shading, have contributed to fulfilling the criteria of nearly zero energy buildings. Not least, smart technologies, such as demand controlled mechanical ventilation and heating/cooling, smart thermostat and lighting etc. have been integrated into the building design. Despite the (almost) catholic agreement upon the final goal, there have always been debates along the way regarding the priority of the measures, the most optimal combination among them and of course the cost. The decision was even more difficult in renovation projects with focus on the energy performance upgrade of existing buildings. Various tools have been developed to assess the profitability of the energy efficiency measures.

### Towards Zero Emission Buildings

Yet another parameter was to make the 'equation' more complicated; the carbon footprint of the selected measures. The latter was just a pixel in the large picture of 'decarbonization of the building sector'. To take it one step further, before the building industry fulfilled the 'zero energy buildings'

goals, they had started discussing the next goal of 'zero emission buildings'. In fact, in some countries, e.g. Norway, the 'problem' of energy efficiency during the operation phase of a building was solved for all new buildings as well as for a large share of the existing stock; the GHG emissions due to heating in buildings in Norway represent only the 1% of the total emissions, a reduction of 80% compared to 1990. Norway has steadily and dedicatedly worked on energy efficiency in buildings and has strengthened its building regulations since the dawn of this millennium. There is no surprise that Norway has already developed a definition on 'Zero Emission Buildings' since 2016, i.e. before the 'deadline' for the

implementation of the EU's strategy for nearly Zero Energy Buildings and way earlier compared to EU's proposal in late 2021 for revising the current Directive to 'make a step forward from current nearly Zero Energy Building to Zero Emission Building'. According to the latter, 'a zero emission building is defined as a building with a very high energy performance, with the very low amount of energy still required fully covered by energy from renewable sources and without on-site carbon emissions from fossil fuels. The ZEB requirement should apply as of 1 January 2030 to all new buildings, and as of 1 January 2027 to all new buildings occupied or owned by public authorities. While the focus of the proposal is the reduction of operational greenhouse gas emissions, ZEB definition further includes the calculation life-cycle Global Warming Potential (GWP) and its disclosure through the energy performance certificate of the building'.

### Operational GHG emissions: only a part of the picture

Despite the step forward, it has been already documented in research as well as professional studies that only a complete life-cycle assessment

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of GWP can provide a holistic and realistic picture of a building's carbon footprint. In other words, not only the operational phase, called 'Use stage' (B1-B7) according to the relevant European standard EN 15978:2011, but also the materials and construction, called 'Product stage' (A1-A3) and 'Construction Process stage' (A4-A5) should be included. The share of the impact of the so-called embodied emissions, released during the stage A of building's, become larger as the energy use and therefore the emissions due to stage B decreases. Thus, the true challenge is how to eliminate the embodied emissions, which is expected to strongly affect the construction processes, including building materials and techniques.

### The key role of selection of building materials

A recent research study at Oslo Metropolitan University (OsloMet) has shown that a residential building in solid timber (structural system) would have approximately 12% and 15% less total emissions compared to the same building built in concrete or brick respectively. The buildings use the same energy-efficient mechanical ventilation system and electrical heating system. Only if the heating systems get replaced by heating pumps could concrete challenge the solid timber; the difference in this case would limit to 2.5%.

If more ambitious energy performance standards get used, i.e. passive house standards, the difference in GHG emissions among the various scenarios are more or less the same as in the previous energy performance level. However, the interesting finding is that none of the passive house building scenarios with concrete or brick has shown lower GHG emissions compared to the building in solid timber from the previous energy performance



© European Commission. Nearly zero-energy buildings. [https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/nearly-zero-energy-buildings\\_en](https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/nearly-zero-energy-buildings_en)

level. In other words, the use of a more sustainable building material makes it possible that higher energy use doesn't result in higher GHG emissions. Obviously, the passive house in solid timber has also the lowest GHG emissions among all tested on this more ambitious energy performance level (passive house).

Furthermore, the incorporation of solar panels cannot change the outcome. The negative GHG emissions during the stage B (Use) due to energy production has not been able to counterbalance the relatively high embodied GHG emissions of solar panels during Product stage (A1-A3). None of the building scenarios with concrete or brick, incorporated by solar panels, regardless of the energy supply (electricity, heat pump or biomass) has shown lower GHG emissions compared to the solid timber building with passive house standards (without solar panels).

These findings reflect the principal idea of sustainable building design: the proper selection of building materials

is to play a key role in the life-cycle assessment of buildings. This is only to grow more important with the years, as the demand for decarbonization of the building sector increases and the potential contribution of operational GHG emissions has reached its limits. By including into the discussion the End-of-Life stage (C1-C4), it would make it even more clear why sustainability in the built environment will have to be answered by re-considering building materials and construction process as well as employing reuse of materials and waste management.

### About the author

Dr. Dimitrios I. Kraniotis is an Associate Professor in Building Physics and Materials at the Department of the Built Environment of Oslo Metropolitan University – OsloMet, in Norway, leader of the B<sup>3</sup> research group 'Building Technology, Materials and Physics' and academic coordinator of the master's program in Structural Engineering and Building Technology.



# ASCE-NCS Committee and Branch News and Updates

## Reston Branch

**Freight Data Exchange for Resilient Global Supply Chains.** On September 20, 2022, the Reston Branch hosted Rachel Aland, Freight Program Manager with the Coalition for Reimagined Mobility (ReMo) for her virtual presentation entitled, “Freight Data Exchange for Resilient Global Supply Chains.” Her presentation discussed how unexpected disruptions caused by the COVID-19 pandemic created significant challenges



for operators of the global freight sector. Unprecedented congestion and the breakdown of reliable access to goods for people, businesses, and governments worldwide highlighted the freight sector’s lack of resilience and outdated communication tools. The Coalition for Reimagined Mobility’s (ReMo) new report Solving the Global Supply Chain Crisis with Data Sharing defines how the global freight sector can forge a new path to reinvention, resilience, and sustainability through digitalization enabled by standardized freight data exchange. Moreover, the report concludes standardizing the exchange of freight data can reduce global freight emissions by 22 percent. ReMo’s report also provides global-level recommendations for policymakers to lead the way towards a more resilient and secure future for global supply chains.

Rachel Aland is the Freight Program Manager with the Coalition for Reimagined Mobility (ReMo), the premier global effort for more equitable and sustainable movement of people and goods around the world. As a transportation planner and economist, Rachel has advised governments, private investors, and international institutions on solutions to transportation issues in North America and across Asia. Rachel’s expertise extends across freight, aviation, cross-border infrastructure investment, and public-private partnerships. Prior to joining the ReMo, Rachel was a Principal Consultant with CPCS, a freight-focused,



Canadian-headquartered transportation strategy consulting firm. Rachel has also spent time in Singapore working for the World Bank’s Infrastructure, PPP, and Guarantees team as well as AECOM’s infrastructure advisory group.

## Ethical Challenges for Engineers.

On October 19, 2022, the Reston Branch will host J. Kent Holland, JD, founder and president of ConstructionRisk, LLC, for his presentation entitled, “Ethical Challenges for Engineers.” This event will be hybrid, presenting to both in-person and virtual attendees. His presentation will discuss ethical challenges for engineers. He will present several recent Board of Ethical Review decisions issued by the National Society of Professional Engineers. Learning Objectives include the following:

1. Become more familiar with the National Society of Professional Engineers (NSPE) Code of Ethics for Engineers;
2. Learn lessons from review of recent BER ethics decisions;
3. Learn to recognize potential issues that might create violations of the code of ethics; and
4. Learn some ideas for negotiating with clients to avoid violating ethical obligations.

J. Kent Holland, J.D. is a construction lawyer located in Tysons, Virginia where his practice focuses on representation of design professionals and design-builders. He is also founder and president of ConstructionRisk, LLC, a consulting firm providing risk management services to design professionals, design-builders and insurance carriers. This includes assistance with contract drafting, review and negotiation; change order and claims analysis (preparation and/or defense); risk management counseling; and Program Risk Management for project specific professional liability policies on projects around the country. ConstructionRisk, LLC reviews, redlines and provides advice on well over 2,000 design professional contracts per year.



## A New Innovative Approach to Address Pedestrian and Bicycle Safety at Intersections.

On November 9th, the Reston branch will host Gilbert Chlewicki – NOVA District Traffic Engineer with VDOT for this hybrid presentation of pedestrian and bicycle safety at intersections. Gil Chlewicki became the new NOVA District Traffic Engineer in September 2021 after spending over 20 years as an international consultant. Gil is most known internationally for his expertise and innovation on intersections and interchanges for all users. While working continuously on the practice side, Gil also has spent a lot of time on transportation research, publishing dozens of technical papers and documents. His latest publication was as a co-author of NCHRP Report 948 – Guide for Pedestrian and Bicyclist Safety at Alternative and Other Intersections and Interchanges. Gil spent the maximum three full terms on the TRB Operational Effects of Geometrics Committee and was the chair of the Intersection Joint Subcommittee until that subcommittee merged into the Roundabouts Committee. Gil is now the Research Chair of the Access Management Committee.



The safety of non-motorized users is a major concern in the country, but particularly in Northern Virginia. On average, there is more than one fatality of a pedestrian or cyclist in Northern Virginia per week. Many of these fatal crashes are occurring at intersections, and these locations can vary significantly in terms of the volume of pedestrian traffic.

This presentation will provide a new innovative approach to design safer intersections for pedestrians and cyclists. The presentation will discuss a new process that examines “design flags” that can affect the crash risk for vulnerable users. The presentation will also discuss some misconceptions on what are the most important elements when deciding how to design pedestrian and bicycle crossings.

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**Field Trip to Traffic Systems & Technology (TS&T).** On November 10, 2022, the Reston Branch will host a field trip to Traffic Systems & Technology (TS&T) in Manassas, VA. During the visit participants will learn the traffic signal control and lighting equipment and intelligent traffic infrastructure, as well as the state-of-the-art technology with presentation and hands-on experience. For the traffic devices you see on the roads, you will get a chance to take a closer look and learn how they work.



TS&T has been founded since 2000 as a traffic equipment supplier to the DMV for numerous projects and has staff with shop and field knowledge of operations and installation to share with you. It will be a great opportunity for you to see what you draw on the design plan in a real life at TS&T. Sign-in and a catered lunch will begin at 11:30 with a presentation/tour at 12:00. Be on the lookout for the upcoming announcement.

**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:



### **Younger Member's Forum**

By Kush Vashee, P.E., CAPM, M. ASCE  
**Monthly Happy Hour.** 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.

The group held a happy hour social on Wednesday November 2nd at Craffhouse Ballston! We hope for a bigger turnout at our next in-person happy hour starting at 6PM on January 4th at Penn Social in Chinatown. Look out for some emails soon with registration details and location information. We hope to see you there!



The YMF Group is also planning a Holiday Social in December. Please keep a look out for an email with registration details and more information!

### **Professional Development:**

Additionally, 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](mailto:ncsymfpresident@gmail.com).

**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)

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

### **History and Heritage Committee**

As you may already know, the VA Section is celebrating its Centennial in 2022. The History and Heritage Committee of ASCE-NCS partnered with the VA Section for a site visit and tour of the Canal and Locks at Great Falls in McLean, VA. This is a National Historic Civil Engineering Landmark (NHCEL) shared jointly by the NCS and the VA Sections (as it is within the NCS boundary and also in VA).

The canal & locks were constructed from 1785 to 1802 and operated until 1821. Check out our NCS website for more information on this NHCEL: [Patowmack Canal & Locks – Great Falls VA – ASCE NHCEL](#). The group walked along the canal route observing remnants of canal walls, the Holding Basin, 5 locks, and Matildaville. They also took time to appreciate the Great Falls overlook and flood record marker – this is a must see to believe! The group also visited the ASCE NHCEL Plaque mounted in 1969 on a bolder face adjacent to Lock 1.



If you missed us – you can visit these sites yourself at Great Falls National Park!

### **Environmental & Water Resources Institute**

On October 20th, EWRI held a webinar on EJSscreen presented by Angus Welch. EJSscreen is U.S. EPA's web-based mapping tool for nationally consistent environmental justice (EJ) screening and mapping. The tool combines environmental and demographic data to highlight areas where vulnerable populations may be disproportionately impacted by environmental pollution. The tool also provides access to climate change data, health disparities data, and critical service gaps data. The

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tool enables users to estimate local EJ concerns and to focus resources toward ground-level investigation and mitigation of EJ concerns. The presentation will begin with a review of fundamental EJ concepts. The presentation will then provide a summary of EJScreen data sets, capabilities, limitations, and common uses. The presentation will conclude with a brief question-and-answer session during which participants will be welcome to ask questions on the presented topics and materials.

**About the Speaker:** Angus Welch is the Acting Environmental Justice (EJ) Coordinator in U.S. EPA Region 3. His position is located in Region 3's Office of Communities, Tribes, and Environmental Assessment. His role involves technical analyses and

coordination for Region 3's EJ Program. Angus assists Mid-Atlantic Region communities to identify and address EJ concerns. He also develops metrics, maps, and reports that clarify EJ concerns for communities. He provides EJ trainings for government, community, academic, and business audiences. These trainings cover fundamental concepts as well as analytical tools, such as EJScreen. Angus has worked in Region 3 since early 2020. His prior professional experience occurred primarily in the private sector, including positions as a director of data management and as a management consultant. Angus holds a bachelor's degree in Geosciences from Skidmore College and a master's degree in Applied Geosciences from the University of Pennsylvania.

## **Architectural Engineering Institute Committee**

The AEI DC Committee has been busy planning their events for the end of 2022 and through 2023. The committee is planning an educational event before the end of the year and plans to hold several walking tours in 2023. Keep an eye out for these events – coming to your inbox in the near future! ■



## **VA Section Centennial Update**

### **A Note from Vic Crawford, Chair of the Virginia Centennial Celebration Committee**

On behalf of the Virginia Section, I want to thank all of you for a spectacular Centennial Celebration. The final VA Centennial Celebration Committee Minutes reflect the efforts of many of those that have worked so hard. Through these monthly meetings, the minutes show all the activities we had planned as we began our Centennial Year. When viewed in total, the immense amount of effort you all have devoted to making this Centennial so great becomes apparent. Thank you all.

Through your efforts over the last several years we have truly paid homage to those Civil Engineers that came

before us while promoting our profession to the next generation. Across the Commonwealth our ASCE Members have volunteered as we recognized our outstanding members and supporters at our Gala and at Branch Centennial Celebrations. We have dedicated the Crozet Tunnel in recognition of our past while inspiring the next generation with our interactive map to our ASCE Landmarks and other Civil Engineering Projects across all of Virginia.

Now, as we move forward beyond our 100 Years of Serving the Commonwealth, I want to encourage you to continue and build upon

our Centennial Celebration by joining other Virginia Section Committees that will carry forward our excellent achievements including our STEM Tools such as the Interactive Map and STEM Pamphlet, and the historic documents and write-ups of our Centennial Engineers of the Month.

Thanks so much, this has been an excellent Centennial Celebration,

*Victor I. Crawford, PE, M.ASCE  
Chair, Virginia Centennial Celebration Committee*

## **Employment Clearinghouse**

### **Catholic University of America School of Engineering**

#### **Clinical Assistant/Associate Professor in Structural Engineering (Professor of Practice)**

The Department of Civil and Environmental Engineering at The Catholic University of America seeks applicants to fill a Clinical Assistant/ Associate Professor (Professor of Practice) position in structural engineering to begin in August 2023.

Applicants must have earned doctorate (or all but dissertation) and undergraduate degrees in civil engineering with a focus on structural/geotechnical

or earthquake engineering by the time of appointment. Please submit a cover letter, CV, clear statement of teaching interests, 3–5 references, and 1–2 page personal statement indicating how the applicant's research, teaching, and service will make a distinctive contribution to our University's mission and to the vision of Catholic education outlined in the Apostolic Constitution on Catholic Universities Ex Corde Ecclesiae.

These materials should be uploaded to: <https://engineering.catholic.edu/about-us/opportunities/index.html> Review of applicants will begin

immediately and will continue until the position is filled. For any questions, please contact Dr. Jason Davison at [davisonj@cua.edu](mailto:davisonj@cua.edu).

*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.*