



## WHAT'S INSIDE:

- 02 President's Note
- 03 March Meeting Summary
- 03 Leadership
- 03 Minneapolis/St. Paul Post Scholarships
- 04 Job Opportunities
- 04 JETC 2022
- 05 Minneapolis/St. Paul Education Grants
- 05 Open Committee and Liaison Opportunities
- 06 Sustaining Firms

## SAME-MSP BOARD MEMBERS:

President	David Johnson <i>Houston Engineering, Inc.</i>
Vice President	Erin Krug <i>U.S. Army Corps of Engineers</i>
Jr. Vice President	Cora Núñez Orta <i>U.S. Army Corps of Engineers</i>
Secretary	Eric Henry <i>AECOM</i>
Treasurer	Dan Kvasnicka <i>HDR</i>
Past President	Lindsey Roberts McKenzie <i>SEH</i>
Directors	Ann Banitt W. Paul Waters Dave Ausdemore Allen Witt

UNSUBSCRIBE or SUBSCRIBE to the monthly newsletter.

## VIRTUAL MEETING: 04.20.2022

**Details:** Wednesday, April 20, 2022, at 12:00pm-1:00pm CST

**Cost:** \$0

**Location:** <https://usace1.webex.com/meet/erin.e.krug>

1.0 PDHs will be offered for this event

**Speaker:** Dr. Lauren Linderman

**Presentation Title:** Review of I-35W Bridge Monitoring and Data Interpretation for Engineering

**Abstract:** The I-35W Saint Anthony Falls Bridge, opened in 2008, includes instrumentation for long-term monitoring of the structural behavior of the bridge. Data from the over 500 sensors deployed on the structure, including vibrating wire strain gages, fiber-optic strain gages, thermistors, linear potentiometers, and accelerometers, has been



collected since the bridge's opening. This large-scale, long-term deployment offers insight on monitoring of bridges and a unique dataset to investigate structural behavior. In this presentation, key results from the monitoring system will be reviewed. Of particular interest are the temperature-dependent and long-term time-dependent behavior of the post-tensioned concrete bridge. A data analysis approach that leverages temperature, strain, and displacement sensors distributed throughout the structure to capture the time-dependent behavior will be described. For a structure that sees significant temperature loading and gradients, the temperature captured by the thermistors is essential to capture the temperature-dependent behavior used in evaluating time-dependent deflections and can account for significant strains. The potential impact of these analysis results on concrete bridge design practice and lessons learned for monitoring deployments will be summarized.

**Speaker Bio:** Dr. Linderman is an Associate Professor in the Department of Civil, Environmental, and Geo- Engineering at the University of Minnesota. She earned her Ph.D. in Civil Engineering from the University of Illinois at Urbana-Champaign in 2013. Dr. Linderman's research combines analytical and experiment studies in the area of smart structures for improving the long-term performance of civil infrastructure through both monitoring and vibration mitigation. She received the NSF

CAREER in 2018 on sensor selection for reliable monitoring and control of civil systems. She was named Young Engineer of the Year in 2019 by the Minnesota section of ASCE and serves on the ASCE MN Board and the ASCE EMI Technical Committee on Structural Health Monitoring and Control.

**VIRTUAL:** <https://usace1.webex.com/meet/erin.e.krug>

If you are unable to access the Eventbrite page to register, please reach out to Dan Kvasnicka via email at Daniel.Kvasnicka@hdrinc.com and he can get you registered via email.

## **PRESIDENTS NOTE**

Greetings! Spring has sprung, and hopefully along with that a return back to “normal” life pre-Covid 19. We’ve had a number of great presentations this year and our Post Leadership discussion group continues to roll along with great attendance and exchange of ideas and experiences. We have Dr. Lauren Linderman of the U of MN visiting with us in April and we have our joint session with MN AFPM in May.

We are continuing to put out the call for volunteers (list on second to last page of this newsletter). We will also be seating new officers in July; please consider giving your time to a great group of folks. Until next month.

Warm Regards,  
Dave

## **MARCH MEETING SUMMARY**

A joint meeting was held on March 16, 2022, between the ASCE Minnesota Section and SAME Minneapolis-St. Paul Post with guest speaker Monte Neimi, Founder and CEO of TDA Manufacturing. The topic of the presentation was Innovative Applications Using Tire-Derived Aggregate. Monte Niemi has been a leader for over 40 years in developing markets for Tire-Derived Aggregate, which has many civil engineering applications. Monte Neimi presented on current stormwater best practice management tools, problems with current solutions, beneficial properties of Tire-Derived Aggregate, and civil engineering success stories for Tire-Derived Aggregate being utilized as a sustainable option for stormwater, road repair, and bridge abutments.

Through Niemi’s leadership and educational efforts, the use of TDA is spreading throughout the nation assisting in the End-of-Life Tire Problem. He is instrumental in creating the TDA market for civil engineers, formulating TDA material specifications, and working with civil engineers over the years on various projects leading to construction installation specifications.

Thank you to Mr. Neimi for the technical presentation and to ASCE MN Section for hosting this meeting!

## **LEADERSHIP**

One of the goals for SAME is to Grow Leaders for the nation. The MSP Post is supporting this national goal by planning a new series of leadership events in 2022. The post is launching an MSP Post leadership book/video club, formatted so that each session is separable, and attendees do not have to worry about being out-of-sync if they miss one session.

**Event Date:** April 13 11:30-12:30 Central

**Topic:** TBD as we get closer to the event

**VIRTUAL:** <https://usace1.webex.com/meet/erin.e.krug>

We have had two sessions now that have been a lot of fun and we are going to do it again! Look for more information. For any future event questions: Contact Erin Krug ([erin.e.krug@usace.army.mil](mailto:erin.e.krug@usace.army.mil)) or Ann Banitt ([ann.m.banitt@usace.army.mil](mailto:ann.m.banitt@usace.army.mil)).

## MINNEAPOLIS/ST. PAUL POST SCHOLARSHIPS

---



### Post Scholarship Applications Available

The 2022 Scholarship Application Forms are now available on the [STEM Outreach](#) page of the MSP Post website, as well as via the link below. The SAME Minneapolis-Saint Paul Post will be granting three scholarships: two (2) one-time \$1500.00 scholarships and one (1) \$1500.00 multi-year scholarship (\$6000.00 max). The deadline for submitting scholarship applications is **Friday, April 8, 2022**.

If you know someone who is deserving of a scholarship, please urge the young person to apply for one the Post's scholarships. Applicants are rated in several areas including academics, school activities, and community activities. High school seniors and post-secondary students are eligible if they are either:

Children, grandchildren, or siblings, of members of the Minneapolis-Saint Paul Post. Sponsoring members must be a SAME Minneapolis-Saint Paul Post member for the current year and have been a member of the Post for a minimum of at least one year prior to the current year.

Student Members of the SAME Minneapolis-Saint Paul Post who will be registered as full-time post-secondary students in the fall of the year of selection. Applicants under this category must be registered through SAME as a Student Member; student memberships are free for full-time undergraduates at an accredited college or university, or high school students.

Applicants must be registered as full-time post-secondary students in the fall of the year of selection and be majoring in an accredited engineering, science, math, or technology-related field and/or disciplines that will specifically support these fields of study.

A committee of Post members evaluates the applications. All applications are kept confidential, and only the winners are announced. For additional information, please contact [Cora Nunez](#) at [Coralys.N.Nunez-Orta@usace.army.mil](mailto:Coralys.N.Nunez-Orta@usace.army.mil) or 787.463.6663. Scholarship Application Packages can be downloaded from the Post's website at:

<https://www.same.org/Get-Connected/Find-a-Post/MPLS-STPL/STEM-Outreach/Post-Scholarships>

## MINNEAPOLIS/ST. PAUL POST EDUCATION GRANTS

---



### **Application Deadline: April 8, 2022**

Do you know of an elementary, middle school, or high school who could use a boost to their STEM education program? The MSP Post offers education grants to help schools augment their programs that can spark our youth to go into a STEM field! For more information contact Chris Erickson at: Chris Erickson [Christopher.R.Erickson@usace.army.mil](mailto:Christopher.R.Erickson@usace.army.mil).

### **JOB OPPORTUNITIES!**

Due to recent historic funding levels and new staffing requirements, the US Army Corps of Engineers is HIRING! Please join the first-ever USACE Mississippi Valley Division (MVD) Virtual Hiring Fair, April 13 (10am-3pm CST)! This virtual event will be hosted via Yello, a talent acquisition software that allows job seekers to view positions across all Districts within the Division. Candidates can register for time slots to participate in informational sessions and learn more about a rewarding career with USACE.

Need more information or unable to attend? Contact a recruiter: [MVDCareers@usace.army.mil](mailto:MVDCareers@usace.army.mil)

### **JETC 2022**

SAME's 2022 Joint Engineer Training Conference & Expo (JETC) is headed to Aurora, Colo., May 10-12. Join your friends and colleagues from across the A/E/C profession and joint engineer community for three days of education, training, and networking that is simply unmatched within the industry. And after three years since the last in-person JETC, we simply can't wait to see you again! Here is a link to the conference site: [Home - Joint Engineer Training Conference & Expo \(JETC\) \(samejetc.org\)](https://www.samejetc.org)

### **OPEN COMMITTEE AND LIAISON OPPORTUNITIES!**

Here is a great opportunity for someone wanting to become more involved in a professional organization! The following are the open committee and liaison leadership roles that can be filled immediately:

- ★ Awards Committee Chair
- ★ Newsletter Coordinator
- ★ Small Business Liaison
- ★ Industry Day Committee Co-Chair

You can find a list of our current committee and liaison roles on our website at <https://www.same.org/Get-Connected/Find-a-Post/MPLS-STPL/Get-Involved/Committees>. Feel free to reach out to the person listed as currently holding that position if you have any questions about the role (email hyperlinks are included on the website). If you are interested in being part of the MSP Post leadership team, please reach out to David Johnson at [president@samemsp.org](mailto:president@samemsp.org) or to Erin Krug at [vp@samemsp.org](mailto:vp@samemsp.org). Please consider volunteering and get more involved with our active Post!



**THANK YOU!**

Thank you to all our Sustaining Firms—we appreciate your support and want to make sure all our members are aware of it, too!

- ★ AECOM
- ★ Anderson Engineering of MN
- ★ Ayres Associates
- ★ Benham Design, LLC
- ★ Bergmann Associates
- ★ Burns & McDonnell
- ★ Cardno Inc.
- ★ CDG Engineers, Inc.
- ★ Cushing Terrell
- ★ Damon Farber Assoc.
- ★ DLR Group, Inc.
- ★ Greenstone Construction Inc.
- ★ Hammel Green and Abrahamson
- ★ Hanson Professional Services
- ★ HDR
- ★ Houston Engineering, Inc.
- ★ HR Green, Inc.
- ★ J.F. Brennan Company, Inc.
- ★ Kaiyuh Services, LLC
- ★ Landmark Environmental
- ★ Leo A. Daly
- ★ LS Black Constructors
- ★ Mortenson Construction
- ★ RSP Architects
- ★ SEH
- ★ Siemens Industries, Inc.
- ★ Stanley Consultants
- ★ Stantec
- ★ Terracon Consultants
- ★ Ulteig
- ★ Vann Companies
- ★ Wood Group

**Did you know that as part of your sustaining membership we encourage you to talk about yourselves to our members?** Please email Dave Ausdemore at [dave@hsscience.com](mailto:dave@hsscience.com), if you would like more information on how to get involved!

