February 2018

February Joint ASCE Geotechnical Group & Seattle Section Dinner Meeting

Ground Deformation Effects on Subsurface Pipelines & Infrastructure Systems



Thursday, Feb 22, 2018
Tom O'Rourke
Thomas R. Briggs Professor of Engineering
Cornell University

There are tens of millions of km of pipelines worldwide used in water supplies, gas and liquid fuel delivery systems, electric power networks, and wastewater conveyance facilities.

Soil-structure interaction, various models for soil-pipeline interaction, methodology for evaluating soil-pipeline interaction in granular soils, suction-enhanced soil reaction, soil-pipeline interaction modeling, large-scale laboratory testing and numerical modeling, and innovative ways of accommodating ground deformation will be presented.

Tom O'Rourke will describe a water supply system response to widespread liquefaction-induced ground deformation during the Canterbury Earthquake Sequence in New Zealand, evaluated with high density LiDAR and GIS analyses, and a methodology for estimating pipeline damage as the combined response to liquefaction-induced differential settlement and lateral ground strain. The community impact of pipeline system performance is illustrated with respect to the role that the water supply plays in fire suppression in San Francisco.

Bellevue Red Lion (View) 11211 Main Street Bellevue, WA 98004

5:30pm Social Hour 6:30pm Dinner 7:15pm Announcements 7:30pm Presentation 8:30pm Adjourn

Regular Registration ends at 3PM the Friday before the event.

Late Registration ends 12 hours before the event.

Click Here to Register

2018 is a great year to get involved in ASCE.

When you join ASCE, you become part of the largest professional civil engineering network in the world. As a part of our community, you have access to our industry's most comprehensive communication, networking, and learning resources. As an ASCE member, you have access to a wealth of benefits that serve you throughout your career.

Not an ASCE member yet? Become a member today!

Already a member? Upgrade or renew your membership!

January President's Column Guest Author



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Younger Members Forum

MARCH 2018 NEWSLETTER CONTENT DEADLINE: FEBRUARY 20, 2018 By Don Nguyen, PE, ENV SP, STP L2, Seattle YMF President

Greetings! This month, I am your guest writer for the President's Column, here to catch you up on the inner workings of the Younger Member Forum (YMF).

Multi-Region Leadership Conferences (MRLCs) and Western Region Younger Member Council (WRYMC)

6 Younger Members, 3 UW students, and 2 Section leaders from Seattle have returned from the MRLCs in Las Vegas with renewed enthusiasm and buzzing ideas on how to improve the way ASCE is ran in Seattle. The convergence of engineers from all around the Western Region allow for the cross pollination of ideas! Debrief meetings are being planned to discuss what types of events we can host and what we can do differently to better serve our members here in Seattle.

At the conferences, we also met the YMF presidents from North Seattle Branch and Inland Empire, as well as students from WSU. We hope to further strengthen our connections with members throughout Washington by hosting more joint events. Our upcoming annual leadership retreat with the Portland YMF will be a good opportunity for continued networking, so we extend our invitation to all the surrounding YMFs and student chapters.

Regional awards are presented at WRYMC for the 20+ Younger Member groups within the Western Region. The Seattle YMF has a strong history of wins. Visit our <u>WRYMC awards page</u> to see past award recipients. This year, I was honored with receiving the Outstanding Young Civil Engineer in the Private Sector award!

Mentorship Program

This year, we began creating a mentorship program for ASCE Seattle. At Section dinner meetings, we pair willing students with section members to provide a one-off day of mentorship. Pairs are encouraged to network together during the evening. A full-fledged program will begin in the Autumn, coinciding with the start of the next school year. The program will consist of a yearlong connection and will include pairing students and younger members with younger members and section members. Resources from WTS, AWWA, OC ASCE YMF, and UW have been gathered and we plan to create a committee to develop the Seattle ASCE mentorship program.

What the YMF can do for you:

If you are a young civil engineer in the greater Seattle area, consider joining us at an upcoming event. We host many kinds of events:

- Networking happy hours in <u>Seattle</u> and the <u>Eastside</u> where appetizers are on us;
- Community service activities like <u>Brides for a Cause</u> on February 9th;
- K-12 outreach like the <u>PSEC engineering fair</u> on February 10th:
- The annual <u>Popsicle stick bridge competition</u> for high schoolers also on February 10th at the Museum of Flight (<u>Promo Video</u>);
- Sports activities such as soccer, volleyball, hiking, and a summer golf tournament;
- College outreach (students are Younger Members too, so feel free to join us at any of our events);
- Professional development tours and an Executive Forum coming up in the Spring.

For more information about our events, visit us at our<u>webpage</u>, friend us on <u>Facebook</u>, follow us on <u>Instagram</u>, or sign up for our newsletter!



Volunteer on the R.H. Thomson Scholarship Committee

The R. H. Thomson Memorial Scholarship is an annual scholarship awarded by the Seattle Section each year to honor the accomplishments of R.H. Thomson. The Scholarship Committee is responsible for judging applications and selecting the \$5,000 scholarship recipient, subject to confirmation by the Seattle Section Board.

The aim of the scholarship program is to encourage students to pursue a course of study leading to a Bachelor or a Master of Science degree in Civil Engineering or one of the specialties within the Civil Engineering discipline. It also strives to honor R. H. Thomson, a civil engineer who had a profound and lasting impact on Seattle's infrastructure.

Email Diana Hasegan if you are interested in volunteering on the committee.



Congratulations to ASCE Seattle Life Members

A Life Member is an individual who has made a lifetime commitment to ASCE and the civil engineering profession by remaining a member for the full length of their professional career.

Thank you to the following life members for your many years of commitment to the industry and ASCE:

- William Swigart, P.E., D.PE(Ret.), M.ASCE
- Timothy Pugh, P.E., M.ASCE

- Mc Lelland Smith, P.E., M.ASCE
- Jeffrey Lundt, P.E., M.ASCE

- Gordon Clark, P.E., M.ASCE
- Steven Miller, P.E., M.ASCE
- Manfred Zinserling, P.E., M.ASCE
- Donald Samdahl, P.E., M.ASCE
- Robert Schildgen, P.E., M.ASCE
- Paul Shanta, P.E., S.E., M.ASCE
- Paul Godlewski, P.E., M.ASCE
- Randolph Sleight, P.E., L.S., F.ASCE
- Arthur Fleming, P.E., M.ASCE
- Jon Magnusson, P.E., S.E., Dist.M.ASCE, F.SEI
- John Campion, P.E., M.ASCE

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- Ronald Paul, P.E., M.ASCE
- Thomas Gates, P.E., F.ASCE • Frank Watkins, P.E., M.ASCE
- William Chang, P.E., M.ASCE
- Guy Conversano, P.E., M.ASCE
- James Kleppe, P.E., M.ASCE
- Kathleen Robertson, P.E., M.ASCE
- John Chou, P.E., M.ASCE
- Susan Bolton, P.E., M.ASCE
- William Enkeboll, P.E., M.ASCE

We Need Your Feedback!



The ASCE Seattle Section Board would like your feedback on the idea of creating an ASCE Western Washington Section. Please review the proposal and answer a few questions. This should take no more than 5 minutes. The survey will be closed on February 16th, 2018 and results shared shortly thereafter.

This is not an official vote for creating a Western Washington Section. This will be used to evaluate whether further steps should be taken to develop governing documents for a Western Washington Section that would be voted on by all affected members later this year.

We appreciate you for taking the time to provide valuable input. Click the survey icon to the left to take the survey.

University Mentor Night - Help Needed!



North Seattle College Thursday, March 1, 2018 6:00 to 8:00 pm College Center Building – 1st Floor Cafeteria 9600 College Way North, Seattle, WA 98103

If you are interested in being a mentor for a night for college students, the Puget Sound Engineering Council (PSEC) needs your help!

The purpose of the mentor night activity has been to bring as many practicing engineers together with as many students as possible. We are trying to inspire the students, most of whom are freshmen and sophomores as well as high school seniors, toward a career in engineering. The mentor night allows engineers to relay their experience in the profession and answer questions posed by students. The event will be kicked off with a brief introduction of the engineering disciplines represented by the volunteers and possibly followed by a brief panel discussion with North Engineering Alumni. Following the panel discussion will be an open forum where the students visit various tables and converse with the mentors.

Mentors are asked to bring a sample of work that will fit on a 30"X30" table top for potential discussion with the students.

If you are interested in participating, please sign up online at: https://www.eventbrite.com/e/2018-northseattle-college-engineering-mentor-night-tickets-42499864238

Maps and further instruction will be sent out prior to the event.

Mentor Night events are also held each year at the Seattle Pacific University, Seattle Central College, Bellevue College and Highline Community College. Upcoming events are posted on the PSEC website http://www.pseconline.org/mentor-nights/

Thank you for your support.

K-12 Outreach Committee Call for Volunteers

Puget Sound Engineering Council (PSEC) Engineering Fair

On **Saturday, February 10th** we will be hosting a fun and interactive activity booth at the Museum of Flight and you can join the fun! Our activity booth will be a part of the **Puget Sound Engineering Council (PSEC) Engineering Fair**. The K-12 outreach committee has participated in the PSEC Engineering Fair for several years and it always proves to be a great opportunity for community outreach. There are (3) volunteer shifts, which are from 10:00a-12:00p, 12:00p-2:00p, and 2:00p-4:00p. If you have any questions or if you're interested in volunteering please email Brad Strandquist at bstrandquist@mka.com. Please indicate your requested shift.

Hope to see you there!



ASCE invites you to submit nominations for awards recognizing ASCE members as outstanding leaders and managers. **Nominations are due by March 1, 2018.**

A short summary of the five awards follows. The complete nomination rules and forms can be found on the <u>Civil Engineering Entrepreneur of the Year Award</u>, the <u>Edmund Friedman Professional Recognition Award</u>, the <u>Government Civil Engineer of the Year Award</u>, the <u>Outstanding Public Official Award</u>, and the <u>Parcel-Sverdrup Civil Engineering Management Award</u> pages of the ASCE website.

Civil Engineering Entrepreneur of the Year Award

The Civil Engineering Entrepreneur of the Year Award recognizes successful entrepreneurs who have created private-sector organizations with sustained growth in civil engineering employment over a decade or more.

Edmund Friedman Professional Recognition Award

The Edmund Friedman Professional Recognition Award recognizes a Society member who has contributed substantially to the status of the engineering profession by establishing a reputation for professional service.

Government Civil Engineer of the Year Award

The Government Civil Engineer of the Year Award recognizes distinguished civil engineers employed in public service for significant engineering contributions as a practitioner in public service.

Outstanding Public Official Award

The Outstanding Public Official Award (previously the Civil Government Award) recognizes those members of the engineering profession who have rendered meritorious service in elective or appointive positions in government.

Parcel-Sverdrup Civil Engineering Management Award

The John I. Parcel-Leif J. Sverdrup Civil Engineering Management Award recognizes effective leadership and management skills in the civil engineering profession.

You are encouraged to review the information and develop nominations for these important awards. In the event you have questions or need guidance on the nomination process, please contact Jane Moran Alspach at jalspach@asce.org or j

Thank you in advance for your nominations.

ASCE Mourns Tragic Deaths of Two Members in Amtrak Derailment



On December 18, 2017, an Amtrak train near DuPont, Washington, derailed, resulting in the deaths of three passengers. Two of these passengers were ASCE members, close friends, and rail enthusiasts, Zack Willhoite and James Hamre. Hamre was a retired engineer and volunteer for All Aboard Washington. Willhoite worked as a customer support specialist for Pierce Transit. Both men were eager to be aboard the very first run of the new route between Tacoma and Olympia. T&DI mourns their passing, and celebrates their enthusiasm for transportation engineering.

Washington State Report Card Volunteers Needed!

We are gaining momentum in updating the report card. In December the ASCE Seattle Section was awarded a State Public Affairs Grant (SPAG) to help fund our report card undertaking.

Volunteers are needed for developing our report card! Categories Include:

- Aviation
- Bridges
- Dams
- Drinking Water
- Rail
- Roads
- Schools
- Solid & Hazardous Waste
- Stormwater
- Transit
- Waste Water



If you are interested in volunteering or have questions or comments, email Erik Ellingsen at erik.ellingsen@hartcrowser.com.

Previous work by ASCE members to develop the first report card and two recent example cards (storm water and the electrical grid) have been uploaded to <u>Collaborate</u> and Google Drive.

Save the Date: Rebuilding Together Volunteer Event

April 28, 2018

New affordable housing is costly compared to rehabilitation and repair. Even with the Seattle Housing Levy providing additional financing, 1 new unit of affordable housing in Seattle costs on average \$268,605 to build. Come join ASCE at the Rebuilding Together event on Saturday, April 28 th this year. You could be part of a community of local volunteers transforming deteriorating houses into safe, healthy, and affordable homes. If interested in volunteering, please contact Megan Ramsay at megan.ramsay@abam.com.



Meet a Board Member

Amanda Schweickert | Director of Standing Committees

Before becoming a Civil Engineer, Amanda volunteered in the Peace Corps as a high school math teacher in Ghana. Living in West Africa piqued her interest in sustainability and the importance of infrastructure in communities. Amanda tries to incorporate civil engineering and sustainability into her work at BergerABAM and with ASCE, where she

co-founded the ASCE Seattle section's sustainability committee.

Amanda grew up in Allentown, Pennsylvania but was born in Korea and has lived in Israel, Ghana, Oregon, Florida, Utah, and Arizona before moving to Washington. She has an undergraduate degree in Industrial Engineering and Manufacturing from the Pennsylvania State University and has worked in a steel mill, cheese plant and at Walt Disney World. She received a fellowship at the University of Arizona, where she graduated with an M.S. in Civil Engineering focused on structures.

When she is not driving her kids to wrestling or gymnastics, Amanda enjoys paddle boarding, swimming and camping with her family. In addition, she spends many weekends with friends playing Settlers of Catan.

Photo: Amanda made cookes to replicate the Catan board for her friend's birthday!











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New Year - New Exciting Events! Never miss a Seattle Section event, link our calendar to your Outlook today!

Have you seen our new event calendar? <u>Click here</u> to see what exciting events we have planned!

The best way to stay up to date on Seattle Section happenings is to add our calendar to your Outlook or other email manager. All you have to do is click here to download a .ics file that you can open and add to your own calendar.

