

Newsletter of the Structural Engineers Association of Oregon

SEAO

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Linked in

SEAO has a LinkedIn account and can be followed at <u>SEAO</u> <u>LinkedIn Page</u>.

CONNECTIONS

February 2022 Volume 22 Issue 4

Upcoming SEAO Meetings and Events:

	Wednesday, February 23, 2022: SEAO Virtual Trivia Night Scholarship Fundraiser		
	Time: 5:30 pm Virtual Cocktails		
	6:00 pm Trivia Competition		
	Donation: \$25 for Individuals or \$125 for a Team of 5		
	Contact Jane to arrange donation.		
	See page 6 for flyer.		
	Visit: <u>https://forms.gle/NVc98PWMYfNNPgH89</u> for additional information.		
	Tuesday, February 22—Tuesday, March 8, 2022: SEAO Virtual Mini-Seminars Schol-		
	arship Fundraiser		
	Time: All Seminars are from Noon to 1 pm		
	PDHs Available: 1 Hour Per Seminar Attended		
	Cost: Free to Attend.		
	See pages 3 & 4 for more information.		
	Register to attend at: https://www.seao.org/calendar		
Ŧ	Wednesday, April 27, 2022: SEAO Lunch Chapter Meeting (Save the Date)		
	Topic: Winner of the 2021 Excellence in Structural Engineering Award for New Buildings		
	Between \$10 Million and \$40 Million: The Canyons		
	Time: Noon to 1:30 nm		

Time: Noon to 1:30 pm Location: TBD PDH: 1 Hour (no credit to Affiliate Member)

Wednesday, May 25, 2022: SEAO Lunch Chapter Meeting (Save the Date)

Topic: Surfside Condominium Collapse Time: Noon to 1:30 pm Location: TBD PDH: 1 Hour (no credit to Affiliate Member)

Wednesday, August 10, 2022: SEAO/OACI Golf Tournament

Location: Langdon Farms Golf Club, 24377 NE Airport Road #1, Aurora, OR Shotgun Start: 1:00 pm; Social Hour 6:00 pm; Dinner & Awards 6:30-7:30 pm Additional information will be provided in the next newsletter.

<u>YMF UPDATE</u>

YMF in-person happy hours are back. They are held every third Thursday of the month at 6 pm. Young Members can sign up to be added to the email list to receive invites and notification of location at: <u>https://forms.gle/3uMBDQGRzhdcs76z9</u>. CONNECTIONS is a monthly publication of the Structural Engineers Association of Oregon, published to disseminate current news to our membership and others involved in the profession of structural engineering. The opinions expressed reflect those of the author and, except where noted, do not represent a position of SEAO.

Send membership inquiries to: 9220 SW Barbur Blvd. No. 119

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PRESIDENT'S MESSAGE By: David Linton

SEAO Members,



Just like that the first month of the year is in the rear-view mirror! There is a lot to be excited about in the coming months for SEAO. This month we have our 2nd Annual Trivia Night hosted by the YMF group. Gather your friends and put together your best team for a fun night of competition amongst your fellow engineers. Word on the street is that Catena is ready to defend their title from last year and welcomes all challengers. Not only do you get an evening of entertainment, but your money goes to support the

scholarship foundation--that's two birds with one stone or, in engineers speak, that is efficiency.

In addition to the Trivia Night, we have several industry partners that have signed up to present their products in a series of seminars hosted during the lunch hour over the course of a week. This is an opportunity to get a good number of PDH credits free of charge. We appreciate these sponsors stepping up to help support the scholarship foundation. So far, we've raised enough to fund one of our scholarships. If you'd like to support the future of our profession with a donation, please reach out to Jane.

Another event that is ongoing during the month of February is the NCSEA Structural Engineering Summit with both virtual and in-person options. This is an opportunity to learn about advancements in the industry and other initiatives that NCSEA is leading. Several of our members will be attending the Summit to represent SEAO, including Nisarg Mehta who was awarded a Summit scholarship from NCSEA as a YMF representative. I'd encourage our young members to apply for this scholarship in future years as an opportunity to get financial support to attend the conference.

As an OSU alumnus, I was proud to find out that one of the students who received the inaugural diversity scholarship from the NCSEA foundation was OSU student Aime Nocoulma. This is a great initiative from NCSEA. Many of you might not know a benefit of being an SEAO member is that a portion of your annual dues goes towards your NCSEA membership. If you haven't already taken the time, go sign-in to the member portal at <u>www.ncsea.com</u> to take advantage of your full benefits.

It is also exciting to hear that our Golf Tournament Committee has secured a spot at Langdon Farms in August for the golf tournament we co-host with OACI. Some of us might want to take advantage of the recent string of nice weather to work on that slice in the coming months.

Cheers,

David

SEAO COMMITTEES

CODE ADVISORY COMMITTEE Seismic Reid Zimmerman

reid.zimmerman@kpff.com

Wind OPEN CHAIR

Snow Load Andy Stember andy@jasenginc.com

Code *Eric Watson* eric@miller-se.com

Vintage Building Jennifer Eggers jennifer.eggers@holmesstructures.com

Special Inspections *Eric Watson* eric@miller-se.com

Mass Timber Eric McDonnell Eric.McDonnell@holmesstructures.com

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Awards Brynn Adkins badkins@tmrippey.com

Golf Tournament *Stephen Stenberg* steez07@yahoo.com

Conferences *Kevin McCormick* kevin@miller-se.com

ADVOCACY COMMITTEE Website

Website Seth Thomas seth.thomas@kpff.com

Engineers Week *Michelle Juarez* michelle@miller-se.com

Young Member Forum Sarah Johnson sarah@mstructural.com & Emma Olds eolds15@gmail.com

CONTINUING EDUCATION <u>COMMITTEE</u> Seminars Andy Stember andy@jasenginc.com

MEMBERSHIP COMMITTEE

Newsletter *JoMarie Farrell* jomarie@equilibriumllc.com

Roster Jane Ellsworth jane@seao.org

DELEGATES

NCSEA & WCSEA/NWC

David Linton dlinton@mcknze.com

Seth Thomas (Alternate) seth.thomas@kpff.com

MINI SEMINAR SCHEDULE

The Mini Seminars that we typically have at our Trade Show are going virtual this year. Our sponsors have generously stepped forward to provide educational opportunities to our membership while helping to fund scholarships for students studying Civil and Structural Engineering. Mini Seminars will be 1 hour in length and will be from noon to 1 pm. See below for schedule and sign up for each seminar at: <u>https://www.seao.org/calendar</u>. They are <u>free</u> to our members who sign up. 1 PDH will be awarded to members who sign up on the website for each seminar they attend.

<u>Tuesday, February 22, 2022, Noon – 1:00 pm</u>

SIMPSON STRONG-TIE

Commercial Products by Brad Maier, PE

For this education session, we will be discussing Simpson's offerings for anchorage into concrete, CMU, and Masonry. Each base material has unique attributes which require proper testing to ensure the high performance and quality standards of the industry and that expected of Simpson Strong-Tie. The session will continue discussing building structures with cold-formed steel. Cold-formed steel structures are a unique type of stick-type framing, which Simpson offers a full range of connectors to ensure engineers' proper load path is achieved.

Wednesday, February 23, 2022, Noon-1:00 pm

SIMPSON STRONG-TIE

Recent FRP Advances and Case Studies by Alex Daddow, PE

For this education session, we will review a series of case studies which resulted in projectspecific FRP testing at our Ty Gill Lab. We will delve into the project backgrounds, the issues faced by the AEC teams involved, and how Simpson Strong-Tie's engineering services and project-specific testing capabilities were able to produce solutions. Each case study will feature a project-specific test example with explanation of how the results were applied to the real-world project.

Thursday, February 24, 2022, Noon-1:00 pm

VERCO DECKING

Basics of Diaphragm Design Connections by Tyler McNutt, PE

The basics of diaphragm designs and connections is a primer on the use of structural steel deck connection types, details, patterns, and applications. It also includes a brief discussion of hanging load connections and an overview of design resources including the use of online web tools to comply with the IBC 2018 / AISI S310 provisions for steel deck.

Friday, February 25, 2022, Noon – 1:00 pm

SIMPSON STRONG-TIE

Yield-Link Moment & Braced Connections by Connor Lester, PE

For this education session, we will be discussing the state of the existing structural steel moment and braced frame markets and how the Yield-Link® line of connections are uniquely situated to revolutionize the industry. We will discuss the prequalification requirements of Simpson Strong-Tie's Moment Connection and how they are engaging with engineers, fabricators, and erectors to simplify the design, detailing, and construction of special moment frames. Additionally, we will discuss how Simpson Strong-Tie's Braced Connection stacks up when compared to other commonly specified SCBFs, EBFs, and BRBFs. Lastly, we will run through a quick example design utilizing the fully-integrated connection design available in RAM Structural System.

MINI SEMINARS (CONT.)

Monday, February 28, 2022, Noon – 1:00 pm EUCLID

Concrete and Sustainability by Amir Bonakdar

This presentation will address various topics related to sustainability and carbon footprint of concrete construction. Concrete is the second most used material per capita in the world (after water), and its environmental impacts can be significant. "Net zero" or neutral carbon concrete is targeted by 2050 and the path forward includes many steps from improved cement production to optimizing mix designs and using novel materials. When chemical admixtures are used in concrete in small portions, lesser amounts of water and cement will be needed to achieve similar or improved concrete properties. Concrete durability can be significantly enhanced by engineered mix designs and protective coatings. Moreover, replacing steel wire mesh or rebar in concrete with reinforcing fibers, where possible, will reduce the carbon footprint related to embodied energy and will improve the service life of the structure.

<u>Tuesday, March 1, 2022, Noon – 1:00 pm</u>

PEIKKO

John Riley will explain how slim floor structures can help solve your design challenges. The program will examine industry standards and performance attributes for slim floors, enabling professionals to select the most efficient system for a specific project

Wednesday, March 2, 2022, Noon – 1:00 pm

VERCO DECKING

Joists by Darrell Marchell, PE

This talk will cover the Expanded LH-Series joist tables, providing structural engineers with nearly twice as many standard joists for each joist depth. The load ranges have increased to nearly 3,000 plf within each joist depth, allowing engineers to pick joists for floor applications with the deeper 2- and 3-inch deck profiles. The beneficial effect of standard SJI camber will be explored and simple techniques to arrive at the dead, live, and net total deflection will be covered in this seminar. The Vulcraft tool for evaluating vibration will be demonstrated; this tool simplifies the engineering effort to arrive at acceptable solutions and allows multiple scenarios to be evaluated quickly.

Tuesday, March 8, 2022, Noon – 1:00 pm SIMPSON STRONG-TIE

Mass Timber by Ryan Edwards

Please join us for the latest smart solutions in Mass Timber construction. We will have updates on diaphragm connections, gravity hangers (including concealed and fire conditions) as well as showcasing a wide variety of structural fasteners. The newest building method is here and learn how to connect it all!

NCSEA UPCOMING WEBINARS

February 22nd

Structural Engineering Considerations for Mid-Rise, Light Wood Frame Buildings

Speaker: Ashley Cagle, P.E., S.E. is a licensed professional and structural engineer in the state of California and joined Woodworks in 2020 as their Technical Director.

March 10th

<u>2021 IBC Significant Structural Changes—Part 2: Foundations</u> and Materials

Speaker: John "Buddy" Showalter, P.E. is a senior staff engineer with the International Code Council's product development group.

Visit NCSEA's website <u>http://www.ncsea.com/education/</u> webinars/ to view all upcoming webinars.

ASK A QUESTION, GET AN ANSWER

Do you have a code question you would like to ask the Wind Committee or Snow Committee? SEAO is pleased to announce a simple way for Q&A's with technical committees. Email questions to jane@seao.org, and SEAO will direct your question to the appropriate committee chair for a response. Questions and their answers will be made anonymous and available to the membership on the website <u>www.seao.org</u>. Committees include: Seismic, Wind, Snow, Code, Vintage Building, and Special Inspections.

2022 SEAO EXCELLENCE IN STRUCTURAL ENGINEERING AWARDS

The SEAO website will be accepting entries for 2022 SEAO Awards consideration after February 21, 2022. Visit the <u>seao.org</u> website, login, and select the SEAO Award Submission button. Make sure you enter the "Work in Progress" section and you will be ready to go. Remember, you can work on your entries over the course of several days or even months.

The judges have requested that entrants be as descriptive as possible about their structural aspects of the project.

We want to see what you have been working on! Start thinking about a project or projects you want to enter.

EMPLOYMENT OPPORTUNITIES

<u>CATENA ENGINEERS</u> Structural Engineer Portland, OR

catena consulting engineers provides the personal environment of a small firm while providing the opportunity to work on a variety of projects.

Our projects vary in size from a single day's effort to large projects with construction values in excess of \$300 million. You will gain design experience in concrete, steel, timber, and masonry buildings and will work on a wide variety of project types, including buildings created for healing, learning, living, and interacting.

Due to the technical complexity and challenge of many of our projects, we seek engineers that hold a Masters degree, and that have a desire to learn, grow, and be challenged. U.S. citizenship is preferred. We are currently seeking engineers at all levels of experience in structural engineering for buildings.

For a detailed advertisement and to submit your resume, visit our website <u>http://www.catenaengineers.com/</u>opportunities.php

HOLMES STRUCTURES

Structural Engineer
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Portland, OR
Seattle, WA

Holmes is a structural and fire engineering firm, with offices in San Francisco, Los Angeles, Portland, and Seattle. We are part of the New Zealand based <u>Holmes Group</u>, with offices around the Pacific Rim. Compelled by the possibilities, we are relentlessly pursuing Why – to create what is Best.

We are seeking Engineers for our San Francisco, Los Angeles, Portland and Seattle offices. Candidates must be fast learners, ambitious, have the ability to handle increased responsibilities, have excellent verbal and written communication skills, and be able to interact effectively with clients, project teams, and colleagues. We are looking for all levels of Engineers.

Check us out at <u>www.holmes.us</u>.

INTERESTED IN JOINING US? PLEASE visit <u>Holmes - Career</u> <u>Page</u> TO SUBMIT AN APPLICATION. SEAO YMF (YOUNG MEMBER FORUM) PRESENTS

TO BENEFIT THE SEAO SCHOLARSHIP FUND

23RD

FEBRUARY Virtual Trivia Starts at 6 pm Cocktail Hour Starts at 5:30 pm \$25 for an individual, \$125 for a team of 5

COMPETITION I NETWORKING I PRIZES FOR TOP 3 TEAMS

Registration starts on February 1st https://forms.gle/6LeeB9aLZmQRkpLSA *Registration fees are tax deductible and considered a donation

Send questions to YMF.SEAO@gmail.com