

Newsletter of the Structural Engineers Association of Oregon

SEAO 9220 SW Barbur Blvd. No. 119 PMB #336

Portland, OR 97219 Phone: (503) 753-3075 E-Mail: jane@seao.org

Website: www.seao.org

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

CONNECTIONS

November 2023 Volume 23 Issue 3

Upcoming SEAO Meetings and Events:

Tuesday, November 14, 2023: SEAO Chapter Lunch Meeting

Topic: Beyond the Prescriptive Code Path & SEAOSF Scholarships Announcement

Speaker: Kyle Kraxberger, SE, Associate Principal, DCI Engineers Location: Old Spaghetti Factory, 715 S Bancroft Street, Portland, OR

Time: 11:30 am Check-in; Noon-1pm Lunch, Program, & Scholarship Awards

See Page 3 for more information and links to register.

Tuesday, January 16, 2024: SEAO Chapter Lunch Meeting (SAVE THE DATE)

Topic: Hayward Field, University of Oregon, Eugene, Oregon

Speaker: Wyatt Henderson, PE, SE, Principal at Magnusson Klemencic Associates

Location: Old Spaghetti Factory, 715 S Bancroft Street, Portland, OR

Time: 11:30 am Check-in/Lunch Buffet; Noon-1 pm Program

Tuesday, February 13, 2024: SEAO Structural Engineering Awards Banquet See page 4 for more information.

Tuesday, March 12, 2024: SEAO Chapter Lunch Meeting (SAVE THE DATE)

Topic: Hyatt Regency Hotel Walkway Collapse Speaker: Marc Sokol, MS, PE, SE; Location: TBD

Tuesday, March 26—Thursday March 28, 2024: International Mass Timber Conference (SAVE THE DATE)

Location: Oregon Convention Center, Portland, OR See Page 6 for additional information.

Tuesday, April 9, 2024: SEAO Trivia Night (SAVE THE DATE)

Tuesday, May 14, 2024: SEAO Tradeshow and Seminars (SAVE THE DATE)

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
PMB #336
Portland, OR 97219

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nmehta@dci-engineers.com

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kylean@miller-se.com

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elyssa.adams@holmesstructures.com

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PRESIDENT'S NOVEMBER MESSAGE BY: Jared Lewis, PE, SE

SEAO Members:



Welcome to a glorious fall in the Pacific Northwest! This month's theme is *Participation*.

Our November lunch meeting is on November 14 at The Old Spaghetti Factory. Over lunch, we will celebrate this year's SEAO Scholarship winners and hear from Kyle Kraxberger from DCI about how we adopt building code language, the limitations of the building code, and how to navigate scenarios that are undefined by code language. Please hold your comments until the end! 2 Registration is open on the

SEAO website, and your attendance and *Participation* is strongly encouraged! I hope to see many of you there.

Please spend time reviewing the Upcoming Events for future *Participation* opportunities. If you are like me, the number of opportunities for professional development, social engagements, organizational participation and so-on can be overwhelming. I have found the summary content of Upcoming Events in the Connections newsletter to be more than helpful when determining where to focus my attention. This year, I am particularly excited about two upcoming events:

- The 2023 SEAO Awards Banquet on February 13, 2024. The deadline for submitting for an award, or awards, is December 19, 2023. Submittal requirements and award categories can be found on SEAO's website. I would like to encourage everyone to submit their work and share it with our peers. Our work is important to our communities and worth celebrating whether selected for an award or not.
- 2. The SEOAC Convention and the Northwest Convention are combining forces next September! Please see the announcement in this newsletter (on page 6) for further information and a request for interested volunteers to help with the planning effort. The convention is one of the best technical and social events I have had the pleasure of attending, and I encourage anyone who is interested in volunteering or attending to sign up. Please continue to look for updates as we get closer to the big event.

Finally, in sticking with the theme of *Participation*, there are opportunities at the local and national levels to be part of committees. Locally, SEAO has numerous committees that have various levels of activity and need for members and chairs. If interested, please spend some time reviewing the various committees and reach out to the SEAO Board or listed committee chairs. You can find committee information on SEAO's website. At the national level, NCSEA is now accepting nominations for next year's Board of Directors. This is a fantastic opportunity to continue the legacy of SEAO's participation at the national level. Per NCSEA, "ideal candidates are exemplary practicing structural engineers who have current or recent experience within NCSEA as a delegate, committee member, or chair . . ." If you are interested in nominating a member or being nominated, please reach out to the SEAO Board so we may officially send the nomination to the nominating committee. Nominations are accepted through **November 22, 2023**.

Thank you all in advance for *Participating* in any way you are able. SEAO is only strengthened through your continued efforts and involvement!

Thank you, Jared Lewis, 2023/2024 SEAO President

SEAO COMMITTEES

CODE ADVISORY COMMITTEE

Seismic Jonathan Knudtsen jknudtsen@wje.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

Sustainability *Jo Ann Offill* joffill@mcknze.com

STRUCTURAL ENGINEERS
EMERGENCY RESPONSE (SEER)
David Tarries

David.tarries@portlandoregon.gov

PROGRAM COMMITTEE

Awards Brynn Adkins badkins@tmrippey.com

Golf Tournament OPEN CHAIR

Conferences

Kevin McCormick
kevin@miller-se.com

ADVOCACY COMMITTEE Website

Seth Thomas seth.thomas@kpff.com

Engineers Week Michelle Juarez michelle@miller-se.com

Young Member Forum Eric Esqueda & Emma Olds YMF.seao@gmail.com

SE3
Annabel Shephard
shep.annabel@gmail.com

CONTINUING EDUCATION COMMITTEE

Seminars Andy Stember andy@jasenginc.com

MEMBERSHIP COMMITTEE

Newsletter *JoMarie Farrell* jomarie@equilibriumllc.com

Jane Ellsworth jane@seao.org

DELEGATES

NCSEA & WCSEA/NWC David Linton dlinton@mcknze.com

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

NOVEMBER CHAPTER MEETING TUESDAY, NOVEMBER 14, 2023, 11:30 AM-1:00 PM

Topic: Beyond the Prescriptive Code Path & SEAOSF Scholarships Announcement

Description: We will explore how code is adopted, what are the bounds of the OSSC, and where the code breaks down. We will also discuss how to apply engineering judgment in ambiguous situations. We will talk about how to tackle serviceability items such as fire requirements, deflection, and vibration criteria, as well as some of the construction field-fix items, such as bowstring-truss repair, etc.

Speaker: Kyle Kraxberger, SE, is an Associate Principal at DCI Engineers in Portland. Coming from a contracting family, Kyle developed his early basic construction and engineering skills by building houses. Since joining DCI Engineers in 2012, he has vast experience with retrofitting existing buildings, new construction, demolition work, and construction fixes around Portland and beyond. Kyle enjoys working on diverse teams where he can provide unique, innova-



tive, and collaborative designs. He acquired his Master of Engineering from Portland State University.

Location: The Old Spaghetti Factory, 715 S Bancroft Street, Portland, OR Parking information: Free Parking Lot with Validation Provided During Meeting

Time: 11:30—Check-in Cost: \$35 Prepaid Members
Noon—Lunch & Program \$45 Prepaid Non-Member

\$20 — Students

Reservations: Pre-registration is required for all. You can register and pay online at https://www.seao.org/events/nov2023/beyond-prescriptive-code-path before end of day, Friday, November 10. You can also register with Jane Ellsworth via phone at (503)753-3075 or via Email: jane@seao.org. Note: No-shows will be billed.

PDH Credit: 1 PDH has been recommended for this program.

Questions: Contact Jane Ellsworth at jane@seao.org

2023 SEAO EXCELLENCE IN STRUCTURAL ENGINEERING AWARDS

The SEAO Awards Committee has opened the SEAO website to accept submissions for the 2023 awards consideration. Projects must have been completed in 2021, 2022, or 2023. **Submission deadline is end of day on December 19, 2023.**

Award categories include:

- New Buildings Under \$10M
- New Buildings \$10M to \$40M
- New Buildings Over \$40M
- Renovation/Retrofit
- Special Use Structures

The awards banquet will be held on **Tuesday, February 13, 2024**. Visit https://www.seao.org/committees/advocacy/awards-committee to see the Awards Committee web page and to begin your submission(s). Don't forget to login to access the website to start your submission. For ease on the submission process, you can start, stop, and save your work as you create your submission.

Eligibility requirements include:

- 1. Project must have completed construction during the calendar years of 2021, 2022, or 2023.
- 2. At least one member of the design team, research team, or a principal of the firm responsible for entry must be a member of SEAO.
- 3. Entries may be of any size, type, and location.
- 4. Projects may be submitted into one category only. SEAO reserves the right to reassign the category, should it meet the criteria for more than one category.
- 5. Each company may submit up to two projects per category (10 projects total).

We especially encourage small firms to submit their projects. Remember to submit as much technical information as possible. The judges are looking for your engineering challenges and creative structural ideas. We want to see what you have been working on! Start thinking about a project or projects you want to submit for consideration or visit the link above to begin your submission(s).

IN MEMORIAM JERRY ESTOUP, PAST PRESIDENT, SEAO



Jerry Estoup, age 81, passed away on October 28, 2023, while watching his beloved Oregon State Beavers play football on TV, dog in his lap.

Jerry received his BSCE from OSU in 1965 and started his career with Cooper, Rose and Associates in downtown Portland. In 1968, he joined James G. Pierson, Inc., who had an office across the street. Jerry's career spanned more than 40 years and his desk never ventured more than those two city blocks before retiring in 2009. Jerry authored the 1970's version of the Snow Load Analysis for Oregon and was a Past President of the Structural Engineers Association of Oregon and the Engineers and Architects Council of Oregon.

An avid golfer, Jerry played weekly with a group of engineers dating back from his Cooper Rose days and that group celebrated their 50th year of league play in 2023. Lost a good one.

VOLUNTEER FOR ARCHITECTS IN SCHOOLS

Introduce elementary school students to the power and possibilities of design through the Architecture Foundation of Oregon Architects in Schools program. Your participation creates lifelong learners and critical thinkers who have a greater understanding of their environment and its impact on people's lives.

Volunteer professionals such as engineers, architects, contractors and other designers are paired with an elementary school teacher to deliver creative, design-based lessons. Sign up to share your passion and expertise on design, while increasing student engagement and success.

2023-24 Program Information: bit.ly/ais programinfo Volunteer Application: bit.ly/ais23-24 volunteerapp

Application Deadline has been extended. Apply today!

Questions? Contact Candice Agahan, Education Program Manager at Candice@af-oregon.org

or phone: 503.542.3823

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 provide 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 www.seao.org. Committees include: Seismic, Wind, Snow, Code, Vintage Building, and Special Inspections.

YMF UPDATE BY: EMMA OLDS & ERIC ESQUEDA

In October, a few YMF members got together to practice their golf skills at Top Golf in Hillsboro, Oregon. It was a ton of fun, and they hope to do this event again.



YMF is also working together with the SE3 committee to help develop/enhance an existing education outreach program, but they need volunteers to help. Please reach out to YMF co-chairs if you are interested at YMF.seao@gmail.com.

If you would like to be added to the YMF email list, please use the following link to contact us: https://forms.gle/QzeAz78h4MVVe8tDA.

ANNUAL DUES REMINDER

Annual dues for SEAO membership were due by October 31, 2022. The SEAO website is open for paying dues. Visit: https://www.seao.org/ to login and pay your dues. Please contact Jane at jane@seao.org if you'd like to pay an alternate way. Renewal rates are as follows:

- Member (licensed PE in Oregon): \$125
- Affiliate Member (unlicensed): \$110
- Student Member (full-time student in Civil or Structural Engineering): \$20
- Life Members, Retired Members/Affiliates, or Professors: \$25

SEER UPDATE BY: DAVID TARRIES, PE, SE

SEER put on our first OrSAP training through SEAO on October 12, 2023. 43 names were sent to OrSAP and Cal OES SAP for registration. The turnout was good and we plan to offer more options for training in the future.

As a reminder, there are ways to get into OrSAP without taking a full day course if other acceptable trainings can be verified. Those with current Cal OES SAP or WAsafe evaluator cards should eventually get a message from OrSAP asking if they would like to be in the OrSAP database. There should be a link in that request to a 1.5-hour Oregon-specific module to let evaluators know about the specific issues in Oregon and the functionality of the OrSAP system. This outreach has not happened yet, but it has been planned.

If there are people who have taken an ATC 20 course in the last 5 years and have proof of training that can be confirmed (OrSAP will reach out to the instructor) that would also count for training along with that 1.5-hour Oregon-specific online module. OrSAP would need to be contacted to get that method approved. Here is a link to the OrSAP page: Oregon State Fire Marshal: Oregon Safety Assessment Program: Fire Service Partners: State of Oregon.

Please email SEER (<u>seer@seao.org</u>) or David Tarries if there are any other OrSAP training questions or comments.

ADVERTISING SPACE AVAILABLE

SEAO is pleased to provide full page advertising to members for \$500 and to non-members for \$600. That is the price to run the ad the entire year from September to August.

If you'd like to advertise, please contact Jane at jane@seao.org.

MASS TIMBER CONFERENCE March 26-28, 2024

The International Mass Timber Conference is the largest gathering of mass timber experts in the world, covering the entire industry supply chain.

The conference organizers are looking for Presenters at the upcoming conference. The benefits of presenting include:

- One (1) complimentary full attendee pass (value \$1,275).
- The opportunity to speak to hundreds of global industry leaders who will attend your presentation. Seating has been doubled to accommodate up 900 to 1,000 people per presentation.
- Exposure on the conference website, mobile app, event signage, and potentially on social media.

The deadline for presentation submissions is through November 26, 2023.

Visit: https://masstimberconference.com/ to find out more information on the conference and to register or submit for presentation.

SEAOC ANNUAL CONVENTION & SEANW CONFERENCE JOIN FORCES NEXT YEAR SEPTEMBER 4-7TH, 2024

Next year the Structural Engineers Associations of California (SEAOC) is holding their annual convention in Portland, Oregon on September 4-7, 2024.

Due to the location, the delegates to the NWSEA Conference decided to partner the annual NWSEA Conference with the SEAOC event instead of holding a separate conference.

As part of this partnership, SEAO is responsible for providing some planning committee support. If you are interested in participating in some aspect of planning please reach out to Seth Thomas at seth.thomas@kpff.com.

2023 SEAOSF SCHOLARSHIP AWARDEES



The recipient of the **Susan M. Frey Memorial Scholarship** is **Tod Richards**. Tod is pursuing a Bachelor of Science degree in Civil Engineering at Portland State University. He is a former volunteer firefighter and emergency trauma technician in Elfin Cove, Alaska. While attending Portland Community College, he co-founded the Math Engineering and Technology Lab (METL) club. Tod is interested in pursuing bridge design and assessments of existing structures.

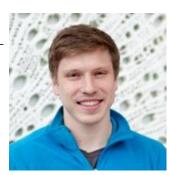
The **Don Kramer Memorial Scholarship** winner is **Jacob Atkins**. Jacob is a graduate student at Oregon State University. Prior to getting married, Jacob was a member of the Antioch Fraternity. He has been serving as the executive Chair of the OSU chapter of ASCE, held the positions of President of OSU's chapter of Xi Sigma Pi National Forestry Honor Society and president of the College of Forestry's FUSe club. Jacob holds a research position with the Wood Science department where he is assisting in the research of Mass Plywood Panel components for building projects. Jacob is pursuing a dual Master of Science degree in Structural Engineering and Wood Science.





An at-large scholarship recipient is **Garrett Duncan**. Garrett is pursuing a Bachelor of Science degree in Civil Engineering at Portland State University. He holds a Bachelor of Science degree in Geology from Humboldt State University, where he served as president of the geology club. He has also worked in wildlife biology, working in the field for outfits such as Point Blue Conservation Science. Garrett is a member of the PSU student chapter of ASCE and participates in the Young Members Forum.

An at-large scholarship recipient is **Steven Kontra**. Steven is a graduate research assistant at Oregon State University pursuing a Dual Master of Science degree in Structural Engineering and Wood Science. Steven's research focuses on experimental seismic testing of mass timber buildings, including an ongoing test of a full-scale six-story mass timber building at the University of California San Diego shake-table facility.



CONGRATULATIONS TO THE AWARDEES!

NCSEA UPCOMING LIVE WEBINARS

REGISTER AT: HTTP://WWW.NCSEA.COM/EDUCATION/WEBINARS/

November 16, 2023, 10 am Pacific Time (Fee for Webinar) <u>Mastering Seismic Design: Answers to the Top 20 Frequently Asked Questions</u>

Speaker: Emily Guglielmo, S.E., Principal, Martin/Martin and Seth Thomas, S.E., Vice Chair ASCE 7-28 Seismic Subcommittee

In this highly informative session, NCSEA has curated a comprehensive compilation of frequently asked seismic questions. The primary focus will be on shedding light on the often-misunderstood or incorrectly applied ASCE 7 seismic provisions, specifically tailored for practicing structural engineers. Prepare to delve into key topics including the importance of redundancy, deciphering the complexities of R, Cd, and Ω o, tackling irregularities, understanding the orthogonal effect, demystifying site-specific response spectrum, and a myriad of other captivating subjects. Join us as we unravel the intricacies of seismic design, equipping you with the knowledge to confidently navigate these seismic challenges. . (1.5 PDH)

November 28, 2023, 10 am Pacific Time (Fee for Webinar) <u>Case Studies in Professional Ethics</u>

Speaker: Tara Hoke, ASCE General Counsel

Case studies in professional ethics can be a valuable and engaging experience. Professional ethics are a set of principles and guidelines that govern the behavior and decision-making of individuals in a particular profession. These ethics provide a framework for professionals to maintain integrity, accountability, and responsibility in their work. This session will review the engineer's ethical obligations as applied to a series of real-life case studies, and will emphasize what engineers can do to advance a culture of ethics at an individual and organizational level. (1.25 PDH)

December 14, 2023, 10 am Pacific Time (Fee for Webinar) <u>An Introduction to the New ASCE Solar/PV Structures Manual of</u> Practice

Speakers: Steve Gartner, P.E., Principal Engineer Renewable Energy, Chair ASCE Solar PV Structures Committee

At this time the U.S. solar industry is operating without solar specific structural consensus standards or codes to provide engineers, owners, manufacturers, developers, and contractors guidance on how to design and build solar photovoltaic (PV) structures. Design engineers and manufacturers have to rely on what they can interpret from the local building codes, or any literature they can find, to design these unique structures. The challenge with allowing a young industry to grow and mature under this type of model is that it results in a wide variety of interpretations of the codes and design literature that leads to a lack of reliability of many solar PV structures. To provide a more reliable and consistent approach to the design of solar PV structures the Structural Engineering Institute (SEI) has through the Solar PV Structures Committee developed a Manual of Practice. This Manual will provide guidelines that engineers can use to rationally design solar PV structures for ground mounted PV, elevated PV, rooftop PV, and floating PV. The committee is made up of structural engineers, geotechnical engineers, contractors, tracker manufacturers, wind specialists, solar developers, and owners who are all working together to provide this guidance document. (1 PDH)

January 25, 2024, 10 am Pacific Time (Fee for Webinar) Boston University Data Science Center

Speaker: Nathan Roy, P.E., Principal, LeMessurier

The Boston University Center for Computing & Data Sciences is a dynamic vertical campus building that leverages shifting free-floating volumes to organized research neighborhoods, each with their own outdoor terrace. Exposed two-story deep perimeter steel trusses cantilever to support the offset massing. A slender concrete core reduced building weight allowing the building to be supported by a concrete mat slab bearing on marine clay, eliminating the need for deep foundations. The project employed concrete with Portland cement replacement rates of up to 70%. (1 PDH)

February 6, 2024, 10 am Pacific Time (Fee for Webinar) Elevator 101

Speaker: Adarsh Jagannath, VDA

This introductory course explores the basic types of elevators, escalators, and miscellaneous lift applications. Additionally, concepts involving structural requirements for different types of elevators will be explored.

There are also recorded webinars that can be purchased for professional development hours (PDHs) online at https://www.pathlms.com/ncsea/events#on-demand-events-content

EMPLOYMENT OPPORTUNITIES

HARPER HOUF PETERSON RIGHELLIS

Senior Structural Engineer Portland, OR

The ideal candidate will be a capable team player, respond effectively to multiple deadlines, and take pride in their work. They must also be highly attentive to detail, and have excellent communication and organizational skills. Some responsibilities will include:

- Provide leadership, project organization, and project review with structural team.
- Mentor technical staff in completion of work tasks.
- Actively participate in structural QA/QC.
- Perform feasibility studies/layout work and analysis of structures.
- Responsible for managing project tasks, budgets, work plans, sub-consultants, and schedules.

Experience/Qualifications:

- Bachelor's degree in Civil Engineering with a structural emphasis.
- Licensed CE or SE, with the ability to obtain Oregon or Washington license within a year.
- Familiarity with applicable building codes and standards.
- Knowledge of structural design software is required.

Apply via HHPR's Career Center.

HARPER HOUF PETERSON RIGHELLIS

Structural Engineer Portland, OR

The candidate will work closely under supervision of an Engineering Manager. They will be competent in preparing detailed construction drawings for numerous types of structures using structural specifications, sketches, detailed drawings, and design information according to project standards. Projects involve work on municipal, residential, commercial, and industrial structures.

Experience/Qualifications:

- Bachelor's degree in Civil Engineering, structural emphasis preferred.
- PE License or ability to obtain license in 1 year.
- Strong organizational, interpersonal, and effective communication skills.
- Strong analytical and problem-solving skills.
- Demonstrated ability to work as part of team.
- Ability to consistently meet project deadlines.
- Must have working knowledge of MS office applications (Word, Excel, Outlook, Teams).
- Experienced in Revit 3D modeling and AutoCAD.
- Experience in Bluebeam Revu.

Apply via **HHPR's Career Center**.

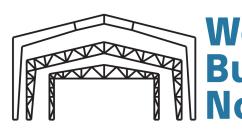
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Structural Engineer Portland, OR

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 http://www.catenaengineers.com/opportunities/



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