



# CONNECTIONS

January 2022 Volume 22 Issue 3

Newsletter of the  
Structural Engineers  
Association of Oregon

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SEAO has a LinkedIn account  
and can be followed at [SEAO  
LinkedIn Page](#).

## Upcoming SEAO Meetings and Events:

### Wednesday, January 26, 2022: SEAO Virtual Lunch Chapter Meeting

Topic: Winner of the 2021 Excellence in Structural Engineering Award for New Buildings Over \$40 Million: The Oregon State University Marine Studies Initiative Building  
Speaker: Seth Thomas, P.E., S.E., KPFF Consulting Engineers

Time: Noon to 1:30 pm

Link to Access Meeting: Register online on SEAO Website at <https://www.seao.org/events/jan2022/oregon-state-university-marine-studies-initiative-building>

Cost: \$25 Member, \$35 Non-member, \$10 Affiliate Member, Free for Student Members

PDH: 1 Hour (no credit to Affiliate Member)

See page 3 for more information.

### February, 2022: NCSEA Structural Engineering Summit

In-Person: February 14-17, 2022 at Hilton Midtown, New York, NY

Virtual: January 31-February 24, 2022

Visit NCSEA at <http://www.ncsea.com/events/annualconference/> for more information.

Registration is now open for All Access (in-person & virtual) and Virtual-Only registrations.

Hotel reservations at a reduced rate of \$219/night are available until February 1, 2022 and are also available on the NCSEA website at <http://www.ncsea.com/events/annualconference/hotelandtravel2/>.

See Page 7 for more information.

### Wednesday, February 23, 2022: SEAO Virtual Trivia Night Scholarship Fundraiser

Time: 6:00 pm

Cost: Free (Donations Are Much Appreciated); Cost to Sponsor: See page 9.

See attached flyer on page 9 for additional information.

### Thursday, February 24, 2022: SEAO Virtual Mini-Seminars Scholarship Fundraiser

Time: TBD PDHs Available: 4 Hours

Cost: Free to Attend; Cost to Sponsor: See page 9.

See attached flyer on page 9 for additional information.

More information will be posted on SEAO website and in February's newsletter once topics and speakers are finalized.

### 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 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)

**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.

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## PRESIDENT'S MESSAGE

*By: DAVID LINTON*

SEAO Members,



I would like to start with wishing a Happy New Year to you and your family. At SEAO we headed into 2022 with great optimism that we would start to return to in-person events. Our October meeting had a strong turnout, which gave the board confidence in planning for our January meeting being in-person back in December. Oh, how things look so different in just a few weeks...Omicron has crashed the party!

Based on the current situation, we moved our January meeting back to Zoom. Finding a venue with enough staffing to serve our meeting was proving problematic. The board is re-evaluating monthly, but our goal is to get back to in-person meetings as soon as is realistic. For those of you that prefer the online format, I would encourage you to reach out to a board member to talk about hybrid options. We are constantly striving to look for ways to better serve our membership, particularly those that are outside of the Portland Metro area.

We have also decided to pivot and move our annual tradeshow from in-person to a virtual format. Borrowing the idea from NCSEA, we are working to put together a series of mini-seminars scheduled over several days to provide some flexibility with work schedules.

The trade show has been a primary fundraiser for the scholarship fund. Each year the SEAO Scholarship Foundation program funds \$13,000 in scholarships to students. Without the trade show, the past couple of years have not been kind to the overall scholarship fund. This year we have set a goal to raise \$6,500. To get there we are going to need help from our membership. Here are a few ways you can help:

- Industry partners are paying for seminar presentations. Attend these to support them and earn free PDHs.
- Gather a team or sign up for our YMF trivia night. More on that below.
- Donate. Contact Jane to donate directly and deduct it on your taxes.

I encourage you to invest in the future of our industry and support in whatever way that you can.

Our YMF group has been planning a trivia night in conjunction with the trade show, which has now been switched to virtual. We intend for this to be an annual event, and the YMF has done an excellent job spearheading this event. Last year's event was a lot of fun and provided some friendly competition. I encourage all of you to participate, and there are options for both individual and team entry.

I woke up on Saturday morning to a tsunami warning for the West Coast; luckily, it was minor in terms of tsunamis. If you want to learn more about tsunamis and one of the first vertical evacuation structures in the US, sign up for the January meeting. We are always looking for good topics as well--please contact Jane or I with your suggestions.

Stay safe, David

## SEAO COMMITTEES

### CODE ADVISORY COMMITTEE

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### STRUCTURAL ENGINEERS EMERGENCY RESPONSE (SEER)

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### PROGRAM COMMITTEE

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*David Linton (Alternate)*  
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## SEAO AWARDS VIRTUAL LUNCH MEETING ANNOUNCEMENT WEDNESDAY, JANUARY 26, 2022

### Topic:

2021 SEAO Excellence in Structural Engineering Award Winner for New Buildings over \$40 Million — The Oregon State University Marine Studies Initiative Building

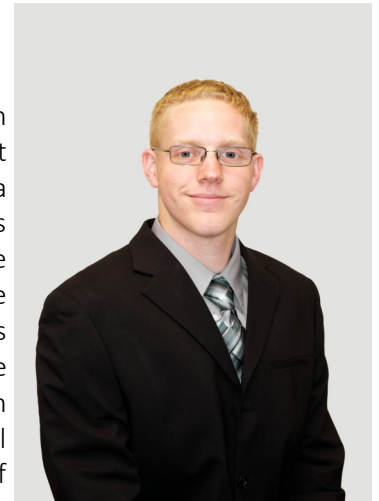


This presentation will go through the design of the new Oregon State University Marine Studies Initiative Building in Newport Oregon. This state-of-the-art facility is the first of its kind in the United States to be designed as a vertical evacuation refuge for tsunamis and using performance-based design resiliency criteria exceeding standard building code requirements. The project also faced challenges with site soil conditions, a complicated peer review process,

and budget constraints.

### Speaker:

Seth Thomas, P.E., S.E., KPFF Consulting Engineers  
Seth got involved in the code development process early in his career and was part of the team that developed the first tsunami provisions as part of ASCE 7-16. Seth is currently a member of the tsunami, flood, seismic, and main committees for the ASCE 7-22 and a member of SEAO code committee that assisted the Oregon Building Codes Division in the adoption of the 2019 and 2022 OSSC. Seth received his Bachelor of Science degree in Civil Engineering from the University of Washington and his Master of Science at Oregon State University. He was president of SEAO during the fiscal year 2017-2018 and was instrumental in the development of SEAO's website.



**Other Information:** SEAO will spotlight the 2021 SEAO Scholarship Foundation Awardees.

**Location:** Virtual. A link to the meeting will be sent via email the evening before the meeting.

**Time:** Noon—1:30 pm

**Cost:** \$25 — Members  
\$35 — Non-Members  
\$10 — Affiliate Members  
Free — Student Members

**Register at:** <https://www.seao.org/events/jan2022/oregon-state-university-marine-studies-initiative-building>

**PDH Credit:** One PDH will be recommended for this program.



# CONGRATULATIONS TO THE 7TH ANNUAL 2021 EXCELLENCE IN STRUCTURAL ENGINEERING AWARDS WINNERS

## Renovation / Retrofit

### **Multnomah County Central Courthouse Jefferson Station Renovation & Seismic Upgrade Equilibrium Engineers, LLC**



The original Jefferson Station structure was completed in 1909 and was the first reinforced cast-in-place concrete structure in downtown Portland. The design team developed a creative plan to incorporate the three-story structure into the new courthouse complex, connecting it to the new 17-story courthouse

building on the same block. The original portions of the concrete building, including the original south and west exterior facades, the perimeter concrete frame, and concrete roof structure were preserved along with a 20-ton overhead gantry crane that hovers above the building's second floor public lobby. New second and third floors were constructed to meet the floor elevations in the neighboring tower. Steel moment frames were added in the north-south direction and new concrete steel braced frames and a concrete shear wall were added in the east-west direction. New concrete column strong-backs were added to the face of existing concrete columns to meet deformation compatibility requirements and provide secondary support of the original roof structure.

Owner/Developer: Multnomah County

Architects: Studio Petretti, SRG Partnership, CGL Ricci Greene, Architectural Resources Group

General Contractor: Hoffman Construction

## New Buildings Under \$10M

### **Abbott Claim Winery Equilibrium Engineers, LLC**



For the majority of the building, the structure is visible, requiring close attention to detail. The versatility of cast concrete was capitalized on to achieve the organic building form and allow for the creation of unique wall and roof elements. The aesthetic and sustainable aspects of glue-laminated timber were driving factors behind the use of radiused glulam beams and Lock Deck laminated decking for the majority of the roof structure. The marriage of the concrete wall systems and the wood roof structure was created in close collaboration with the Project Architect and involved the

development of many unique and visually clean connections. The barrel vault structure was buried into the hillside, with the barrel cellar retaining over 16 feet of soil and supporting 5 feet of soil fill on top of it. Burying the barrel cellar provided a naturally climate-controlled environment conducive to wine aging.

Owner/Developer: Angela Investments, LLC

Architect: Soderstrom Architects/Ferar Studio

General Contractor: Andrew Scott Construction

## New Buildings \$10M to \$40M

### **The Canyons Catena Consulting Engineers**



The Canyons is a unique project born out of a commitment to use mass timber in building structures. The five-story, 110,000-square-foot CLT-framed apartment building features a series of interconnected CLT bridges to allow ease of movement throughout the 70-unit building. The structure is a five-over-two podium with the upper levels constructed of stick-frame wood walls, wood shear walls, and CLT roof and floor decks. The lower levels are post-tensioned concrete slabs with concrete columns and shear walls. The CLT panel layout and configuration created an undulating outdoor corridor between wings of the building. To achieve this design, CLT panels were used in atypical span conditions requiring finite element modeling to confirm the stresses did not exceed panel capacity. Full-scale testing was conducted at Oregon State University to validate modeling results. The use of CLT panels allowed the project to capitalize on rapid construction of each floor.

Owner/Developer: PDX Canyons, LLC

Architect: PATH Architecture

General Contractor: R&H Construction

## Special Use Structures

### **Oregon Zoo Primate Forest Equilibrium Engineers, LLC**



The creativity in this structural design is evidenced by its visual simplicity. Despite having significant loading demands, the structure achieves the required level of strength and stability through small diameter cables with simple, elegant end connections. The tall, organic center supports with integral climbing platforms are absorbed into the form and function of the space, establishing themselves as the epitome of a "play structure". The integration of the cable-stayed structure into the precast concrete Holding Building allowed for both straightforward resolution of cable forces and a functional connection between the two spaces. The end result is a dynamic experience for chimp and visitor alike.

Owner/Developer: Metro/Oregon Zoo

Architect: CLR Design

General Contractor: Lease Crutcher Lewis

Associate Structural Engineers: ARUP

(Continued on Page 5)

## CONGRATULATIONS TO THE 6TH ANNUAL 2020 EXCELLENCE IN STRUCTURAL ENGINEERING AWARDS WINNERS (CONT.)

### New Buildings Over \$40M

#### Oregon State University Marine Studies Initiative Building KPF Consulting Engineers



The Marine Studies Initiative Building is the first to use the recently adopted Tsunami Provisions contained in ASCE 7-16. KPF worked with the design team and OSU to develop a structural performance-based procedure that met building code requirements while providing higher levels of seismic

and tsunami resiliency. This included site-specific seismic evaluations, site-specific tsunami modeling, and large debris tracking. OSU established an oversight committee including faculty and outside engineering experts to review the design criteria, approach, assumptions, and analysis procedures. It is intended that the building will be utilized as a future example for building design in a tsunami inundation zone. The building includes two adjacent structures that are seismically separated. The three-level laboratory wing contains research and teaching labs, critical infrastructure, offices, and the vertical evacuation area on the roof. The two-story commons wing provides a large lecture hall, an innovation lab, and is configured with an exterior sloping ramp connected to the evacuation deck on the roof of the lab wing. Both buildings required a significant foundation support system comprised of deep soil mixed columns extending approximately 100 feet below the surface to support conventional building foundations with uplift anchors to resist buoyancy forces.

The need for this research facility to be located on the OSU's Hatfield campus challenged the team to provide a structure that could be feasibly built within a tsunami inundation zone. The building also required a vertical evacuation refuge for mobility challenged occupants. The structures were evaluated using ASCE 41-13 linear dynamic analysis procedures, and both buildings are designed to resist tsunami inundation loads. The lab building is designed for the greater of the tsunami corresponding to the MCER earthquake and an "XXL1" event. This resulted in an inundation depth of approximately 31 feet above grade at the site. Both buildings were designed to resist tsunami debris impact as required by ASCE 7-16. Extraordinary debris defined by the code such as cargo ships and other large items were addressed by designing the lab wing and vertical evacuation refuge for progressive collapse. Additionally, site specific debris tracking was modeled to assess probability of collision using tsunami inundation depths, velocities, flow direction, and locations of debris sources.

Owner/Developer: Oregon State University

Architect: Yost Grube Hall Architecture

General Contractor: Andersen Construction Company

Thanks to all the members who entered last year's awards. The 2022 SEOA Excellence in Structural Engineering Awards entry portal on the SEOA website will open in **late February 2022**. We had so many wonderful entries last year, and we are hoping that we can continue to increase the number of entries in 2022. Please start thinking about projects you would like to enter for awards consideration. They can be located anywhere in the world, but you must be an SEOA member to enter. The Awards program will be held on October 26, 2022, so save that date.

## NCSEA UPCOMING WEBINARS

January 27th (Non-Webinar Subscription Event, Cost \$195)

Seismic Connections Day 4: Steel: Braced Frame Connections

Speaker: Rafael Sabelli, S.E., is a Senior Principal and Director of Seismic Design at Walter P. Moore. 1.5 PDHs

February 3rd (Non-Webinar Subscription Event, Cost \$195)

Seismic Connections Day 5: Concrete: Seismic Connections for Framing & Foundations

Speaker: Joe Maffei, S.E., PhD, is the founder of Maffei Structural Engineering.

February 8th

201 IBC Significant Structural Changes—Part 1: Loads and Special Inspections

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

February 10th (Non-Webinar Subscription Event, Cost \$195)

Seismic Connections Day 6: Concrete: Seismic Design of Special Shear Walls—Major Changes in ACI 318-19

Speakers: Mehran Pourzanjani, S.E. is a Principal of Saiful/Bouquet Structural Engineers.

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

2021 IBC Significant Structural Changes—Part 2: Foundations 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 <http://www.ncsea.com/education/webinars/> to view all upcoming webinars.

## SEAO/OACI GOLF TOURNAMENT

SAVE THE DATE!

This year's golf tournament will be held on August 10, 2022 at Langdon Farms. Information on registration and sponsorship opportunities will be provided in future newsletters.

## MEMBER SPOTLIGHT NORM FARIS, P.E., S.E.

This month's SEAO Member Spotlight is Norm Faris. Norm has been very active in SEAO over the years. Along with committee work, Norm has had two stints on the Board of directors, filling the different seats along the way. He finished his last term as past president in 2020.

Norm earned his Bachelor of Science degree from University of Portland in 2000 and his Masters from Stanford in 2001. Norm started his career as an intern at KPFF and then stayed on for his first real engineering job. In 2014, Norm started Valar Engineering. His first project was the award-winning Outpost project located in Hood River, Oregon. Norm has done work around the world and most recently in Beirut. When asked about the biggest changes he has seen in his career, he says the collaboration. The integrated teamwork between engineers, architects, and general contractors nowadays makes projects much more enjoyable.

When Norm steps away from the office, he enjoys spending time with his family. Top activities include fishing, community service, and coaching kids basketball teams. He also likes to give back to the engineering community by teaching classes and giving presentations to students of all ages. When asked about advice for others, he said, "Share what your passionate about, so all, but especially the next generation embraces the energy of what we do in the built environment."



## DUES REMINDER

Annual dues for SEAO membership were due on October 31, 2021. You can make checks payable to SEAO and mail to:

9220 SW Barbur Blvd, No. 119  
Portland, OR 97219

Or renew online using a credit card by going to:  
[www.seao.org](http://www.seao.org)

### Renewal Fees:

Member (licensed PE in Oregon): \$115  
Affiliate Member (unlicensed): \$105  
Student Member (full-time student in Civil or  
Structural Engineering): \$18  
Retired Members: \$25

Membership must be current (dues paid) to have your name included in our annual roster. To update our records, please be sure that we have your correct address, name of your company, current phone numbers, and your email address. This will guarantee that you are receiving all correspondence and information from SEAO. You can update your information online or if you have any questions contact [jane@seao.org](mailto:jane@seao.org).

## 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](mailto: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](http://www.seao.org). Committees include: Seismic, Wind, Snow, Code, Vintage Building, and Special Inspections.



# STRUCTURAL ENGINEERING SUMMIT

NEW YORK: FEBRUARY 14-17, 2022

VIRTUAL: JANUARY 31-FEBRUARY 24, 2022



## Designed by Structural Engineers for Practicing Structural Engineers

Love is in the air in New York City.

The NCSEA Structural Engineering Summit has a long history of bringing the best of the structural engineering community together to network, learn, and celebrate the successes of our profession. The Summit offers the industry an immersive experience, both in-person and online, with unrivaled educational opportunities, an industry-leading trade show, and unique networking opportunities. While NCSEA had to postpone the Summit from its normal Fall timing due to the current environment, we are excited to bring it to you this February in New York.

[Register now](#) for the leading event in the structural engineering profession. Seek inspiration from our [keynote speakers](#). Learn from industry experts. Network with industry suppliers at the [Trade Show](#). Experience structural engineering innovation and ingenuity with the [Excellence in Structural Engineering Awards](#). Witness the outstanding service and commitment to NCSEA and the industry of the [Special Awards](#) honorees. Mark your calendars with the help of the [schedule-at-a-glance](#) for both event formats, and be sure you don't miss the Summit.

## SEER UPDATE

BY: DAVID TARRIES, P.E., S.E.

The Office of the State Fire Marshal has been working on developing the OrSAP program. They should be hiring up to two people to run the program this spring. There is a steering committee in progress to help and the SEER committee is meeting to discuss the program.

There are extra seats available in a Cal OES SAP training provided by the City of Portland. The class will be broken into two sessions, one on January 27<sup>th</sup> from 8 am to noon and the other on February 3<sup>rd</sup> from 8 am to noon. If anyone is interested in getting one of the remaining seats, please email your information to [seer@seao.org](mailto:seer@seao.org). We are not sure how long seats will be available. Cal OES SAP training should eventually have an online short course to get reciprocity with OrSAP, and until there is formal OrSAP training available, it is the next best option.

If there are any other questions about SEER or OrSAP, please email [seer@seao.org](mailto:seer@seao.org).

## NEW MEMBERS

Welcome to our new Members:

December:

Peilong Zheng—Madden & Baughman Engineering

January:

John Deppa—ATGI

Sergey Vasilenko—Miller Consulting Engineers

Alexander James—Miller Consulting Engineers

Cyra Steenkolk—Miller Consulting Engineers

Nick Steele—Miller Consulting Engineers

Sabrina Duk—Verahaus Structural, LLC

Cliff Horton—Holmes Structures

Tomlinn Cox—Holmes Structures

Matthew Osborn—Locke Engineers, Inc.

## WELCOME TO SEAO!

## EMPLOYMENT OPPORTUNITIES

### CATENA ENGINEERS

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.php>

### MOFFET ENERGY MODELING

Structural Engineer  
Portland, OR

Moffet Energy Modeling is looking for a highly motivated self-starter to join our structural engineering team as a Structural Designer/Engineer 1. Candidates must have an engineering degree and have passed the PE or EIT with 2+ years of relevant design experience. Design experience should include the design of wood-framed buildings. Experience in the design and analysis of residential buildings and familiarity with structural detailing is a plus.

This position will involve preparing structural calculations and structural construction drawings, under the guidance of a senior engineer, for residential buildings.

Moffet Energy Modeling is a small company focused on sustainable design in the residential sector. Benefits include health/vision/dental insurance, retirement plan, paid time off, and a flexible work schedule. Candidates may work remotely or in our Tualatin office. Contact: [tyler-moffet@moffetenergymodeling.com](mailto:tyler-moffet@moffetenergymodeling.com).

### HOLMES STRUCTURES

Structural Engineer  
San Francisco, CA  
Los Angeles, CA  
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 [Holmes Group](#), 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 [www.holmes.us](http://www.holmes.us).





STRUCTURAL ENGINEERS ASSOCIATION OF OREGON

# 2022 ANNUAL TRADE SHOW

## UPDATE: CANCELLATION AND MOVE TO VIRTUAL FOR 2022

The SEAOSF tradeshow has been cancelled again this year due to COVID. As you know this will be the second year we have not had a tradeshow. However, we are still giving out scholarships (\$13,000 yr) and have had no way to fund These. Any donation that you would be willing to make is much appreciated. We have every intent to return in 2023. We are looking to move the tradeshow to a different month. We will make a decision at our board meeting next month. I will notify you all to keep you in the loop and get it on your calendar.

**Keep in mind any donation you give is a write off as we are a 501C3.**

## SPONSOR OPTIONS:

### SEAOS MEMBERS *(Select all that apply)*

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Trivia Question/<br><b>x \$100.00 ea</b><br><i>Enter Qty</i> | <input type="checkbox"/> Trivia Night Sponsor<br><b>\$550.00</b><br><i>Includes Logo In The Background Behind Trivia Host For Duration</i> | <input type="checkbox"/> Mini Virtual Seminar<br><b>\$235.00</b><br><i>Complete Information Below</i> |
|---|--|---|

### SEAOS NON-MEMBERS *(Select all that apply)*

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Trivia Question/<br><b>x \$110.00 ea</b><br><i>Enter Qty</i> | <input type="checkbox"/> Trivia Night Sponsor<br><b>\$650.00</b><br><i>Includes Logo In The Background Behind Trivia Host For Duration</i> | <input type="checkbox"/> Mini Virtual Seminar<br><b>\$310.00</b><br><i>Complete Information Below</i> |
|---|--|---|



**WHAT:** Annual Trade Show to benefit the SEAOS Scholarship Foundation

**STATUS:** **In-Person Moved to Virtual**

**WHEN:** **Wednesday, February 23rd, 2022**  
Virtual Trivia @ 6pm

**CONTACT:** Jane Ellsworth  
Phone: (503) 753-3075  
E-mail: jane@seao.org

Mini Seminar Title *(If checked above):*

Company Name:

Contact Name:

Phone Number:

Email Address:

Total To Bill:

Pay By Credit Card: ☐  
By Email ☐

*By checking this box, you authorize the SEAOSF to run the credit card info below for the total amount.*

Name:  
As it appears on Credit Card

Credit Card #:

Credit Card Exp Date:

3-Digit Code:  
On back of Credit Card

Billing Zip Code: