

Newsletter of the Structural Engineers Association of Oregon

9220 SW Barbur Blvd. No. 119 PMB #336 Portland, OR 97219 Phone: (503) 753-3075 E-Mail: jane@seao.org Web site: www.seao.org

SEAO

IN THIS ISSUE: PAGE

■ January Meeting An-	
nouncement	
mouncement	

■ NCSEA Delegate Report 3

■ City of Portland	URM	
Ordinance		

- Membership. & YMF Activities 8
- URM & Seismic Upgrade Symposium, E– Week 9
- Job Postings 10
- ■E-Week Flyer 11
- ■SEAW SE Review Flyer 12
- ■Tradeshow Flyer 15
- **■URM Symposium Flyer** 16

SEAO has a twitter account and can be followed at @SEAOregon.



CONNECTIONS

December 2018

Volume 19 Issue 1



















Upcoming SEAO Meetings and Events:

Wednesday, January 30, 2019: January Breakfast Meeting

Topic: Shop fabrication of the Amazon Spheres in Seattle, WA

Speaker: Dan Wyland & Roger O'Hara, Supreme Steel

Location: Portland City Grill, 30th Floor, 111 SW 5th Ave. Portland, OR

Time: Check-in 7:00am, Program 7:30am See page 2 for additional information.

Wednesday, February 20, 2019: 55th Annual Engineers Week Banquet

Location: Lloyd Center DoubleTree by Hilton Hotel, 1000 NE Multnomah

Street, Portland OR

Time: 6:30 pm to 8:30 pm

See pages 9 and 11 for additional information

Wednesday, February 27th, 2019: SEAO 2019 Annual Trade Show

Location: Monarch Hotel, Clackamas, OR

Time: 5:00pm-8:00pm

Annual trade show to benefit the SEAO scholarship foundation. See page

15 for flyer.

Thursday July 18, to Saturday July 20, 2019: URM & Seismic Upgrade Symposium

Location: Portland State University's Lincoln Hall, Portland, OR See page 9 for additional information. Volunteers needed!

Wednesday August 14, to Saturday August 17, 2019: SEA Northwest Conference

Location: Salishan Resort, Gleneden Beach, OR See page 10 for information on volunteering.

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

BOARD OF DIRECTORS

President Norm Faris

Valar Consulting Engineering

Ph: 503.758.8092

norm.faris@valarengineering.com

Vice President Steve Trautwein Jacobs

Ph: 503.235.5000

Steve.Trautwein@jacobs.com

Secretary

Dusty Andrews

Knife River Prestress
Ph: 541.995.6327

dusty.andrews@kniferiver.com

Treasurer

Mike Daily

Lewis and Van Vle

Lewis and Van Vleet, Inc. miked@lvvi.com

Director

Chad Norvell

chad@inka.software

Director

CJ Marquardt

Miller Consulting Engineers

Ph: 503.246.1250

cj@miller-se.com

Past President
Seth Thomas
KPFF Consulting Engineers
Ph: 503.764.0554
Seth.thomas@kpff.com

Executive Secretary Jane Ellsworth SEAO Staff Ph: 503.753.3075 jane@seao.org

JANUARY MEETING

WEDNESDAY, JANUARY 30, 2019



TOPIC:

Shop fabrication of the Amazon Spheres in Seattle, WA

DETAILS:

Video presentation on the collaborative approach on the project between the design and construction teams; from inception thru design to final shipped product.

SPEAKER:

Dan Wyland, Estimator and Project Manager for Canron/Supreme Steel on Amazon Spheres.

Roger O'Hara, Sales Director for Supreme Steel.

Location: Portland City Grill, 30th Floor, 111 SW 5th Ave, Portland, OR

Time: 7:00 am — Registration Cost: \$39 — Prepaid Members

7:30 am — Breakfast & Program \$49 — Prepaid Nonmembers

\$25 — Prepaid YMF

Students-Free

Reservations: Pre-registration is required for all.

You can register and pay online at www.seao.org before noon, Friday, January 25. 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: One PDH has been recommended for this program.

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
Wade Younie
wyounie@dci-engineers.com

Special Inspections

Eric Watson

eric@miller-se.com

Mass Timber
Eric McDonnell
Eric.McDonnell@kpff.com

STRUCTURAL ENGINEERS
EMERGENCY RESPONSE (SEER)
Dave Tarries

Dave Tarries

David. Tarries@portlandoregon.gov

PROGRAM COMMITTEE
Monthly Meetings
OPEN CHAIR

Awards *Brynn Adkins* brynn@wdyi.com

Golf Tournament Stephen Stenberg steez07@yahoo.com

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 Deanna Kuhlman dkuhlman@mcknze.com

CONTINUING EDUCATION COMMITTEE

Seminars

Andy Stember
andy@jasenginc.com

MEMBERSHIP COMMITTEE

Newsletter *Deanna Kuhlman*

Roster
Jane Ellsworth
jane@seao.org

DELEGATES

NCSEA & WCSEA/NWC Seth Thomas seth.thomas@kpff.com

Amit Kumar (Alternate)
amit.kumar@portlandoregon.com

2018 NCSEA SUMMIT: DELEGATE REPORT BY: SETH THOMAS & AMIT KUMAR

NCSEA Summit Recap

By: NCSEA Delegates Seth Thomas & Amit Kumar

This year's NCSEA annual summit was held in Chicago Illinois, October 24th- 27th. Representing SEAO were your primary and alternate delegates Seth Thomas and Amit Kumar. There were a number of other SEAO members in attendance including former SEAO President Ed Quesenberry (now on the NCSEA board), current SEAO vice president (Steve Trautwein), and YM scholarship winner Landon Harmon. This conference is a great event that never disappoints with great educational topics, committee meetings, evening networking activities and delegate meetings.

The conference started out on Wednesday the 24th with a day of committee meetings. NCSEA has several established committees. These include Overall Code Advisory Steering Committee, Code Advisory Sub-Committees on General Requirements, Seismic, Wind, IRC, Existing Buildings, Special Inspection and Resiliency. Other committee's include State Licensure Committee, SEER committee, YMG support committee, Structural Engagement and & Equity (SE3) committee, Publications committee and Communications committee. Bulk of NCSEA's advocacy work is through these various committees. The committees are structured such that all regions of the US are equitably represented on the committees. These committees get their input from member organizations such as SEAO through their member liaisons. SEAO has restructured its committees in previous years to mirror the organization at the national level. Chairs of the various SEAO committees would be SEAO's member liaison to the national committees.

In order to encourage young member participation on these committees, NCSEA has established a new position of Recording Secretary on each of the committees which are to be filled by a Young member. This is a great opportunity for young members to get a foot in the door and become part of national issues. If any of our SEAO young members are interested in serving on a committee as a Recording Secretary, let your SEAO Delegate or any Board member know and we will get you in touch with the appropriate committee chair.

Back to the summit, as the past chair of the NCSEA Young Member Support committee Seth attended the YMGSC meeting. The YMGSC works to support all of the young member groups across the country, from helping groups get started to working with established groups continuing to grow and serve young members.

(Continued on page 4)



2018 NCSEA SUMMIT: DELEGATE REPORT (CONT.) BY: SETH THOMAS & AMIT KUMAR

Amit attended the committee meetings of the Code Advisory Committee for Existing Buildings in the morning and the Seismic committee meeting in the afternoon. Wade Younie, SEAO vintage Building committee chair is the Member Organization liaison to NCSEA on this committee. The Existing Buildings code committee is looking at the proposal for adoption of the Concrete Repair Code (ACI 562) published by American Concrete Institute (ACI) into IEBC 2021. ACI has requested NCSEA's support on the proposal to ICC however members of the committee had some concerns related to provisions in the proposed standard related to fire, vandalism and shoring. Concern was also raised about requiring this standard as a code as opposed to allowing its use as an alternate. The committee members were to meet with representatives from ACI to discuss some of the concerns. In the afternoon Amit attended to a meeting of the seismic sub-committee. The seismic sub-committee is working on a document FEMA P-1091 which is a simplified design guide for design of structures in Seismic Design Category B. The committee is also following proposals before the Building Seismic Safety Council (BSSC) and Provisions Update Committee (PUC). If these proposals are passed by the PUC they are passed onto ASCE for adoption into the code. Some of the proposals being looked at are (a) replacing current Seismic Design Categories A-F with High, Moderate and Small categories; (b) removal of Mass Vertical Irregularity; (c) alternate Diaphragm provisions; (d) Accidental Torsion requirements (e) Updating requirements for 2 -stage procedures specifically related to podium structures; and (f) some requirements for non-structural components.

The conference kicked off Wednesday evening with the and NCSEA Delegates and Young Member reception where the scholarship winners and Young Member group of the year awards were announced. SEAO's Landon Harmon was one of the scholarship winners. Congratulations! The finalists this year for the Young Member group were Washington, Utah, Massachusetts, and New York, with Massachusetts taking home the award.

The evening concluded with a river cruise on the Chicago River. Hosted by Structural Association of Illinois, the docents provided an insight into the buildings and engineering of a city following the Great Fire of 1871 that led Chicago to become one of the cradles of modern American architecture. It showcased the architecture by world-famous architects including Mies van der Rohe, Helmut Jahn and Skidmore, Owings and Merrill with more than 40 distinctive buildings, including the Aon Center, the John Hancock Center, the Willis Tower (formerly known as the Sears Tower), the Wrigley Building, and the IBM Building.

Thursday morning started with the delegate breakfast where we watched a presentation on member engagement by Debra Zabloudil. She had some great points on how to engage members, especially in volunteer organizations. We are hoping that we can provide some of the insights from this presentation back to our local boards.

The conference sessions were then kicked off by a keynote address by Ron Klemencic, CEO, Magsusson Klemencic and Associates, about always striving for better. He made some great points about challenging the norm and to always ask "why" and "why not". These questions have led to the age of Performance Based Design(PBD) where you can challenge the black and white rules of the code. While most people think of PBD as a seismic issue he noted that PBD started in the fire code realm in Las Vegas which has paved the way for large casinos. There is now work on a new PBD wind document expected to be released in 2019 and other future areas where the profession can challenge and push the baseline of the code.

Technical sessions included topics on Wind design, local Chicago projects, seismic design, non-technical issues and an entire track dedicated to issues pertinent to young members. A full schedule of speakers can be found here (http://www.ncsea.com/meetings/annualconference/summitrecap/recapschedule/). Thursday wrapped up with the CSI Party hosted by Ashraf Habibullah, which is always an event to behold. The venue was on the Navy pier and included food, drinks and a live band. The party extended into the night and fun was had by all. (Continued on page 5)

2018 NCSEA SUMMIT: DELEGATE REPORT (CONT.)

BY: SETH THOMAS & AMIT KUMAR

Friday morning started with the delegate interaction breakfast where delegates from each member organization got the chance to talk to each other about topics in a small group setting. Topics this year included Member growth/retention, conferences/events, finances and Delegate interaction. This interaction event has occurred the last few years and from it the "member organization toolbox" was created and is updated. This provides resources for member organizations on a number of topics. One item that SEAO has benefited from is the list of speakers generated by MO's. Friday continued with a number of technical sessions that went the rest of the day. Topics included topics on snow loading, wood design, non-structural items and soft skills. Friday wrapped up with the Annual awards banquet with two local projects taking home awards – the Port of Vancouver Terminal 1 pier and the Ocosta Middle School Replacement & Tsunami Vertical Evacuation project.

The Saturday business meeting concluded the conference. At the business meeting each NCSEA committee gave a short report and a presentation of compilation of the member organization reports was given. Delegates also had the opportunity to vote on some minor by-laws changes. It was also announced that SEAO was awarded a grant of \$1,500 towards SEAO's initiative to commission a study in the development of wind speeds for special wind regions identified in ASCE 7-16 within the state of Oregon. At the conclusion of the meeting the new NCSEA board officially took over with SEAO's own Ed Quesenberry moving from the Director role to the Treasurer role where he will serve a two-year term.

The next NCSEA annual summit is to be held in Anaheim California November 12-15th, 2019.

The Western Council of Structural Engineers Associations (WCSEA) held their meeting on the sidelines of the NCSEA conference. SEAO is member of the WCSEA. In the previous meetings of WCSEA it was decided that going forward WCSEA's annual meeting will be held in conjunction with the NCSEA summit. The council decided that there is a lot of overlap between WCSEA's and Northwest SEA's (NWSEA) missions and functions, and it did not make sense to hold separate annual meetings. However, it was felt that it is important to continue the organization since WCSEA as an organization has a seat on the American Technology Council (ATC) Board of Directors. WCSEA's representative rotates among the various members. This cycle, Lyle Carden, a member of SEA Hawaii is the WCSEA's representative. He took over from Kent Yu, SEAO member. It was also decided to suspend dues collection from member organizations until further notice.



CITY OF PORTLAND: URM ORDINANCE SUMMARY BY: AMIT KUMAR

By: Amit Kumar Section Manager, Sr. Structural Engineer Bureau of Development Services, City of Portland

To reduce the risk posed by unreinforced masonry (URM) buildings, Portland City Council passed an ordinance requiring owners of URM buildings to notify tenants and visitors that the structure is a URM. The ordinance was passed on October 10, 2018.

Placarding and Tenant Notification Requirements

The ordinance requires that:

- A placard be posted on all URM buildings that reads: "This Building is an Unreinforced Masonry Building. Unreinforced Masonry Buildings may be unsafe in an event of a Major Earthquake."
- The building owner must notify existing tenants that the building is an unreinforced masonry building, and unreinforced masonry buildings may be unsafe in the event of a major earthquake
- In addition to a placard, every lease or rental agreement entered into or renewed after the timeline for placarding noted below, must contain a statement that: "This Building is an Unreinforced Masonry Building. Unreinforced Masonry Buildings may be unsafe in an event of a Major Earthquake"
- Building owners must record an agreement not to remove the placard and acknowledgment of compliance with tenant notification requirements
- The ordinance requires URM owners to post a placard according to the following timeline:
 - Publicly-owned buildings: On or before January 1,2019
 - Non-profit buildings: On or before November 1, 2020
 - All other buildings: On or before March 1, 2019

The URM placard must:

- Be at least 8"x10" inches
- Have lettering in at least 50-point bold font
- Be posted in a conspicuous location on the exterior at the main entrance with the following language: "This Building is an Unreinforced Masonry Building. Unreinforced Masonry Buildings may be unsafe in an event of a Major Earthquake."

Exceptions to Placarding and Tenant Notifications

Buildings that have been retrofitted to the following standards will not require a placard or tenant notification:

■ Collapse prevention standard for BSE-2 seismic hazards or life safety for BSE-1 seismic hazard as defined in American Society of Civil Engineers (ASCE) 41-17 or ASCE 41-13 are not required to post a placard or notify tenants

For buildings that were retrofitted before January 1, 2018, either:

- Life Safety standard using FEMA 178, FEMA 310, or ASCE 31; or
- Oregon Structural Specialty Code 1993 edition or later

(Continued on page 7)

CITY OF PORTLAND: URM ORDINANCE SUMMARY (CONT.) BY: AMIT KUMAR

By: Amit Kumar Section Manager, Sr. Structural Engineer Bureau of Development Services, City of Portland

To reduce the risk posed by unreinforced masonry (URM) buildings, Portland City Council passed an ordinance requiring owners of URM buildings to notify tenants and visitors that the structure is a URM. The ordinance was passed on October 10, 2018.

Placarding and Tenant Notification Requirements (cont.)

Enforcement

Portland Fire and Rescue will inspect the placement of placards as part of their inspection program and will work with BDS Enforcement Section in enforcing the requirements for placards.

BDS Enforcement Section will use its existing enforcement program and authority to enforce the requirements for placarding and tenant notification.

Appeals

Building owners who receive notice to place placards and notify tenants but believe that their building is not a URM, or that the URM building has already been retrofitted to meet the standards above, may file an appeal through the bureau's administrative appeals procedure.

Additional Information

- BDS intends to notify all eligible URM property owners about the placarding and tenant notification requirements by December 31, 2018.
- BDS will create administrative rules that clarify how to provide documentation to show compliance with the new regulations.
- BDS will provide guidance on how to file appeals.

In addition to placarding and tenant notification, City Council directed City staff to convene a committee of interested stakeholders including but not limited URM building owners, URM building tenants, Non-Profit groups, people with financing, insurance and actuarial experience and other subject matter experts to further evaluate and recommend reasonable seismic retrofit requirements for a mandatory seismic retrofit program, support, incentives, timelines, financing options, tax strategies, and hardship options and return to Council within a year to report on their findings.

City staff is currently working on the format and approach for the new committee. We will solicit membership applications after the holidays. It is expected that the City will approach SEAO to solicit a member representing the structural engineers on this committee. If you are interested please let Amit Kumar at amit.kumar@portlandoregon.gov know. More information about committee and a link to the application will be provided once it is finalized.

NEW MEMBERS

IN MEMORY OF KEITH KAUFMANN

The new SEAO members for the December are:

Kylean Gunhus – Miller Consulting Engineers **Michelle Sharp** – Miller Consulting Engineers

Sasan Iranpour, Froelich Engineers

Ge Xue – SEFT Consulting Group

Josh Bennett - Western Wood Structures

Spenser Maunu - Equilibrium Engineers

Leah Weis - Student **Matthew Barner -** OSU **Jason Weiss** - OSU

Brian Harting - Rimkus Consulting Group

Sunup Mathew– SidePlate Systems, Inc.

Welcome to SEAO!

Our goal is to provide benefit to our members and the best way to do that is get involved! Watch the emails, newsletters, and website for more information!

YOUNG MEMBER FORUM ACTIVITIES

Upcoming YMF Events:

Friday January 25th—Lunch Meeting

Location: Mackenzie Time: 12:00pm -1:00pm

Thursday January 17th— Webinar

Location: TBD Topic: TBD

Time: 5:30-7:30pm

Dr. M. Keith Kaufman

September 14th, 1959 - November 2nd, 2018

Dr. M. Keith Kaufman, passed away peacefully on November 2nd, 2018. Born in Cheyenne, Wyoming, earned is BSCE from Michigan Tech University in 1984. He continued his education at Purdue University where he earned his MSCE in 1986 and a Ph.D. in 1989. He was the Chief Engineer at Knife River in Harrisburg for 19 years and previously a Senior Bridge Engineer at CH2M Hill in Corvallis, Oregon. Keith was also an Adjunct Professor at Oregon State University, teaching the Prestressed Concrete Design course for 26 years. His students greatly respected him and benefitted from him as an instructor, mentor and team coach. Keith was heavily involved in PCI, chairing several committees and authoring numerous publications. In 2018, he was named a PCI Fellow for his outstanding contributions to the Prestressed Concrete Industry. He was also recently elected to the Michigan Tech Civil Engineering Academy, the highest honor bestowed to alumni, for his passion and advancement of the profession.

His friends and colleagues will remember Keith for his humble presence, love to teach, excellence in his field and the humor and joy he brought to the profession.

VENDOR ADVERTISING

SEAO is now accepting vendor advertising!

Cost of a full page ad running for one month:

\$250 - Members

\$350 - Non Members

For more information, contact Jane Ellsworth at jane@seao.org.

INTERNATIONAL MASONRY INSTITUTE SYMPOSIUM

URM & Seismic Upgrade Symposium (three-day event)

Dates: July 18-20, 2019.

Location: Portland State University's Lincoln Hall, Port-

land, OR

Organizing partnerships: International Masonry Institute (IMI), AIA Portland, SEAO, ASCE, PSU, and others

This Symposium will focus on topics and concerns with URM buildings, including:

- Background on Earthquakes
- URM Construction and Seismic Engineering Technology and Options
- Seismic Upgrade Project Considerations and Costs
- Public Policy, Finance, and Resiliency

The Symposium will also include:

- Seismic Upgrade Project Competition with case studies
- Brewery pub crawl
- Exhibitor booths with sponsorship opportunities and reception
- Cocktail Reception
- One-day walking tour of URM buildings in Portland

We are looking for SEAO volunteers for the following:

- Be on the Seismic Upgrade Design Project Competition organizing group (1-2 engineers needed)
- Help organize the Walking Tour (2-4 engineers needed)
- Please let us know if you are a local engineer that has worked on URM buildings and feels they can contribute to the symposium in other ways as well.
- SEAO would also help us market the event to their members.

Please contact Amy Woods at awoods@imiweb.org or 503-329-3339 if you are interested.



Invitation to Participate:

The 55th Annual Engineers Week High School Program will be held Wednesday, February 20, 2019 at the Lloyd Center DoubleTree Hotel.

This event invites high school students from NW Oregon and SW Washington to explore engineering careers and to be inspired throughout a day of field trips, interacting with practicing engineers, an exhibit hall, and a special banquet. Over 300 students participated in the 2018 event and every year this event inspires high school students to pursue college degrees in engineering disciplines.

Students are hosted by the local engineering community, and the success of this event depends on the participation of local, practicing engineers. Please be a part of the success – support this event through event sponsorship, attend the event and share this email with your colleagues!

Individual and sponsor registration is available through the website at http://www.oregonengineersweek.org/sponsorship/ or by mailing in the attached form with a check.





EMPLOYMENT OPPORTUNITIES (CONT'D)

<u>Lund Opsahl</u> Structural Engineer Seattle, WA

Lund Opsahl is located across the street from Safeco Field, Lund Opsahl is a growing structural engineering firm that provides a wide spectrum of services, including planning, design, seismic and damage assessments, upgrades, additions, tenant improvements, and construction support for a variety of new and existing building types in the Pacific Northwest. Our reputation as creative innovators and technical experts is built on responsive service, collaborative teamwork, and lasting relationships. Our firm's size offers early opportunities to work on challenging projects and encourages exciting career growth uncommon at larger firms, especially for the ambitious.

We value the professional relationships within our firm and we believe those values are fundamental to the development of professional relationships outside of our firm. Collaboration within our office as well as with our clients requires commitment and responsibility.

Structural Engineers of all skill levels are encouraged to apply. Please visit our website, www.lundopsahl.com for additional information and job descriptions. Inquires and resumes may be sent to careers@lundopsahl.com.

Wiseman + Rohy Structural Engineers
Structural Engineer
San Diego, CA

Wiseman + Rohy Structural Engineers is a full service engineering company with four decades of quality projects constructed around the United States. Most of these projects are in Southern California and the western states.

We have an opening for an engineer with over 7 years of experience in structural engineering. This position offers the opportunity to participate in challenging and unique projects in all types of commercial structures. We are looking for a highly motivated engineer to become a long-term part of this established company.

Immediate position available. Please send resumes to HR@wrengineers.com

VLMK Engineering + Design Structural Engineer Portland, OR

VLMK Engineering + Design is seeking a Structural Engineer with 0 to 4 years of experience who is passionate about engineering and wants to broaden their experience working in a collaborative, multifaceted environment with a variety of project and building types.

If you think this might be you, please see the full posting on our website at www.vlmk.com for additional requirements and the benefits of joining VLMK. If you have questions, please contact Trent Nagele at trent@vlmk.com.

Celebrating over 50

years of growing

new engineers in

Oregon &

Washington

55th Annual E-Week High School Program

You are an essential part of the 55th Annual Engineers Week High School Program.

Date: Wednesday, February 20, 2019

Location: Lloyd Center DoubleTree by Hilton Hotel - 1000 NE Multnomah St.

To participate at E-week, do one of the following:

- 1) Go to http://www.oregonengineersweek.org/sponsorship/ for online registration.
- 2) Send in the following form and a sponsor check (see details on next page).

We will contact you with additional day of the event information.

Engineers Week Sponsorship Levels

		Sponsor Included on E-week Web and Facebook Pages	Title Sponsor on all Event Publications*	Official Sponsor of College Seminars	Number of Sponsored Students	# Banquet Dinner Tickets for Your Organization
Platinum	\$2,000	✓	✓	✓	20	15
Gold	\$1,000	1	√		10	10
Silver	\$500	✓			5	5
Individual	\$75	•			1	1

^{*}Title sponsors will be included on all event publications if program support is committed by December 31, 2018.

E-week Sponsor Registration

Organization Name:
Is this a public agency or non-profit? If so, do you want to participate in the Exhibit Hall? Yes please – contact me with more information
Contact Name:
Email Address:
Phone Number:
Sponsor level - check one:
 □ Platinum \$2,000 □ Gold \$1,000 □ Silver \$500 □ Individual \$75 x # of attendees
I cannot attend, but I would like to sponsor a student - \$40
Send this form and a sponsor check payable to "ASCE Oregon Engineers Week" to:
Tova Peltz c/o Oregon Department of Transportation 123 NW Flanders Street Portland OR 97209.

The Engineers Week High School Program is a tax-deductible program affiliated with the American Society of Civil Engineers, a

We will confirm receipt of your registration and send more day of event details.

Please email tova.r.peltz@odot.state.or.us with any questions.



Date: February 5 - March 28, 2019

Time: 6:30 - 8:30pm

Location: University of Washington Campus Mechanical Engineering Building Room 246

Registration Fees:

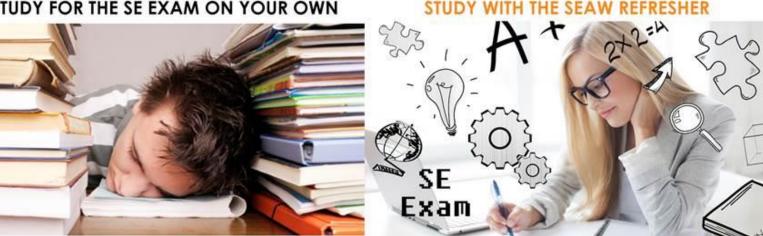
Full Course Members - \$350 Non-Members - \$425

Half Course Members - \$225 Non-Members - \$275

Notes Only Members - \$150 Non-Members - \$200

Register Now!

STUDY FOR THE SE EXAM ON YOUR OWN



Refresher Course

SEAW Seattle Chapter, in cooperation with the University of Washington, will hold its annual Refresher Course on Tuesday and Thursday evenings from February 5th through March 28th.

The course instruction and PDF notes are designed to assist engineers preparing for the NCEES Structural Exam and for practicing engineers who want to review principles of structural engineering. Fifteen two-hour lectures will present information regarding Structural Analysis, Wind Design, Foundations & Earth Retaining Structures, Seismic Design I & II, Structural Steel Design I & II, Concrete Design I & II, Pre-stressed/Post-tensioned Concrete Design, Bridge Design I & II, Wood Design, Masonry Design and Cold-Formed Steel Design.

A half Refresher Course of eight sessions is also available at a reduced rate.

Course presentations are offered online through GoToMeeting or in person at the University of Washington.

New this year! All SEAW members may elect the GoToMeeting option, whether or not, they reside within the Greater Seattle Area.

We would like to welcome Oregon SEAO members for the second year. SEAO Members may register at SEAW member pricing.

For those unable to attend the course, complete course notes of the most recent course are available via a download link for easy access at a price of \$150 for SEAW members, and \$200 for all others.



13

Course Schedule

	Course selicule
Tuesday	Introduction & Analysis
February 5	Bruce Erickson, P.E., S.E.
	KPFF Consulting Engineers
Thursday	Wind Design
February 7	Don Scott, S.E., F.SEI
	PCS Structural Solutions
Tuesday	Wood Design
February 12	Dick Hemmen, P.E., S.E.
	DCI Engineers
Thursday	Seismic Design I
February 19	Mike Visser, P.E., S.E.
	Visser Engineering
Tuesday	Seismic Design II
February 21	Mike Visser, P.E., S.E.
	Visser Engineering
Thursday	Structural Steel Design I
February 26	Mathew Wies, P.E., S.E.
	DCI Engineers
Tuesday	Structural Steel Design II
February 28	Mathew Wies, P.E., S.E.
	DCI Engineers
Thursday	Bridge Design I
March 5	Greg Hess, P.E., S.E.
	KPFF Consulting Engineers
Tuesday	Bridge Design II
March 7	Greg Hess, P.E., S.E.
I I I I	KPFF Consulting Engineers
Thursday	Concrete Design I
March 12	Mark Whiteley, P.E., S.E.
Iviaion 12	CKC Structural Engineers
Tuesday	Concrete Design II
March 14	Mark Whiteley, P.E., S.E.
Tyluren 1 1	CKC Structural Engineers
Thursday	Prestressed Concrete Design
March 19	Ron Mirahsani, P.E., S.E.
With 19	CKC Structural Engineers
Tuesdey	Masonry Design
Tuesday March 21	John Hochwalt, P.E., S.E.
IVIAICII Z I	
Thursday	KPFF Consulting Engineers
Thursday March 26	Foundations & Earth Retaining Structures
Iviarcii 20	
	Andrew McGlenn P.E., S.E. Jacobs Associates
T 1.	
Tuesday	Cold-Formed Steel Design
March 28	Chris LeVan, PE SE
1	KPFF Consulting Engineers Inc.



Credit Card #:

Credit Card Exp Date:

Billing Zip Code:

STRUCTURAL ENGINEERS ASSOCIATION OF OREGON

2019 ANNUAL TRADE SHOW

WHAT: Annual Trade Show to benefit the

SEAO Scholarship Foundation

WHERE: Monarch Hotel in Clackamas

(Sunnyside Road exit off I-205)

WHEN: Wednesday, February 27th, 2019

5:00 PM - 8:00 PM Booth set-up: 1:00 PM Booth break down: 8:00 PM



FORMAT: There are two opportunities for exhibiting goods and/or services.

- **1.** Pre-show seminars. The seminars will last for 1 hour with a 15-minute breakdown and setup period between seminars. Seminar slots go quickly so register early. Laptop & projector are vendor responsibility to supply. 1 PDH is recommended per seminar.
- **2.** Booth 10' with 8' table. As before, dinner and drink tickets will be given to attendees as they check in. The exhibitors must initial the tickets before the tickets can be redeemed for a free drink or meal.

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

COST:	SEAO MEMBERS (Select all that apply)				NON-MEMBERS (Select all that apply)				
[ini Seminar 235	Booth \$550 Includes electricity	Late Fee \$75 Additional after 2/15/2016		Mini Semina \$310	Booth \$650 Includes electricity	Late Fee \$75 Additional after 2/15/2016	;
Min	ni Semin	ar Title (If ched	ked above):						
DONATIO	NS:	raffle are a	greatly appreci	e, and donations to ated. Vendor donati Iditional name expo	ions Add I	Raffle YES	Donation Amou	nt:	
Company Na	ame:								
Contact Na	ame:								
Phone Num	nber:			Email Address:					
Total To Bill:	ailing n	avment so	Pay By Credit MAIL or I	the SEA	king this box, yo OSF to run the w for the total a	credit card amount.	OR - Pay By Che MAIL ON	to "SE	payable AOSF"
	ame:	ayınıent, sei	iu to: SEAUS	or - 9220	our bivu, #1			, OR 3/213	

3-Digit Code:

SAVE THE DATE! PORTLAND, OR JULY 18 - 20, 2019

SEISMIC RESILIENCE SYMPOSIUM

Three-Day Symposium will include:

- Earthquake Background
- URM Construction and Seismic Engineering Technology Options
- Building Codes and Historic Preservation Requirments
- Seismic Upgrade Project Considerations and Costs

- · Public Policy, Finance, and Resiliency
- Seismic Upgrade Project Awards and Cocktail Reception
- Walking Tour of URM Seismic Upgrade Buildings Downtown Portland
- Exhibit Booths and Sponsorship Opportunities

Partnering Organizations:















Registration, Sponsorship & Speakers TBA at aia-oregon.org/URM