



# EQUILIBRIUM

Newsletter of the Seattle Chapter  
Structural Engineers Association of Washington

February 2013

**President:**

Cale Ash

**Vice President:**

Peter Somers

**Treasurer:**

Theodore E. Smith

**Secretary:**

Michael Bramhall

**Past President:**

Howard Burton

**Directors 2010-2013:**

Brian Pavlovec

Michael Wright

**Directors 2011-2014:**

Tom Corcoran

Steve Dill

**Directors 2012-2015:**

Karen Damianick

Steven Pfeiffer

**YMF President:**

Jennifer Ahlport

**Executive Director:**

M. Lynnell Brunswig

**VISIT OUR WEBSITE:**

[www.seaw.org](http://www.seaw.org)

## In this issue

YMF Annual Meeting	1
From the Board	2
In Memoriam	3
YMF Corner	4
Legislative Report	6
Meeting Recap	6
Meetings, Seminars and Announcements,	8
Committee Corner	13
Opportunities	14
Calendar, Membership	15

## Joint Meeting with ACI to Feature Hanford Waste Treatment Plant

February's dinner meeting is a joint meeting with the ACI Washington Chapter and will include a main program featuring a project at the Hanford Nuclear Site as well as a mini-seminar covering a new ACI concrete repair guideline.

The Hanford Tank Waste Treatment project presentation overviews the treatment plan for the 56 million gallons of radioactive and chemical waste currently stored in 177 underground tanks at the Hanford Nuclear Site. Dieter Bohrmann and Dan McDonald from the Washington Department of Ecology will discuss the history and current status of the tank waste treatment project, the risks associated with different waste forms, and Ecology's role in designing and building the \$12.3 billion Waste Treatment and Immobilization Plant.

Dieter Bohrmann is the communication manager and public involvement team lead for the Washington Department of Ecology's Nuclear Waste Program in Richland. Dieter serves as the program's lead media spokesperson and supports the outreach and education efforts on Hanford issues

Dan McDonald is the Tank Waste Disposal Project Manager for the Department of Ecology's Nuclear Waste Program and oversees project work relating to the dangerous waste permit for Hanford's Waste Treatment Plant. Dan has 22 years of experience in project management, quality assurance, and environmental management, twelve of which have been spent working on Hanford-related issues. Before coming to Ecology, he worked for the Department of Defense, Department of Energy, and Department of Energy contractors.

**Mini-Seminar:**

The evening's mini-seminar will cover ACI 562, Code Requirements for Evaluation, Repair, and Rehabilitation of Concrete Buildings. This document, first published in 2012, is sure to be a valuable resource for those involved with existing concrete structures. The mini-



Overall site showing the treatment plant under construction

seminar will be presented by ACI 562 committee member Pete Barlow, a principal with Con-tech Services, a company specializing in the repair, strengthening and protection of concrete structures throughout the western United States.

### Meeting Information:

**Date:** Tuesday, February 26, 2013

**Place:** NEW LOCATION

Hotel Monaco Seattle  
1101 Fourth Avenue, Seattle

<b>Time:</b> 5:00—6:00 PM	<b>Registration and networking</b>
5:30—6:00 PM	<b>Mini Seminar: ACI 562</b>
6:00—6:45 PM	<b>Dinner</b>
6:45—7:00 PM	<b>Welcome and introductions</b>
7:00—8:15 PM	<b>Program</b>

**Menu:** Choose between:

Roasted pork loin with mushroom ragout  
~ or ~  
Ricotta gnocchi with caramelized mushrooms, spinach, and pecorino

<b>Price:</b> SEAW Members	\$40.00
Non-members	\$50.00
Students	\$15.00
Registration after 2/21, add	\$5.00

\* Unemployed *current* members may register at the student rate.

**Registration Required, Prepayment Appreciated**

**Registration deadline is 5pm Thursday, Feb. 21**

Credit cards accepted online only; not at the door. No-shows and cancellations after the deadline will be subject to full charge.

# Your Treasurer Has a Suggestion: Hang on to Your Wallets

By Ted Smith

In 2004, the Seattle Chapter and State Boards, after reviewing the financial status of their organizations, decided it was time to request dues increases. The chapter and state bylaws were changed as required, by votes of the members. In the case of the state dues, ratification by each chapter at a chapter meeting was required. The increases were effective for 2005. Since then, for nine years, the Member SE dues rate has been \$140: \$70 for the State and \$70 for Seattle Chapter.

The Seattle Chapter annual dues total about \$31k. Our administrative costs, including phones, supplies, and Administrator time organizing monthly board meetings, dinner meetings, and all the other SEAW Seattle Chapter activities, are budgeted at \$21k. To encourage attendance at dinner meetings, the dinner prices do not fully cover the expenses. This particularly affects the Spring Social meeting, where guests are encouraged, special guests are subsidized, and awards and SEAW scholarships are presented. These programs often include paid outside speakers. Production of the monthly newsletters uses another \$6.5k. That doesn't leave much for our other ongoing programs, like the YMF, public outreach to students and the general public, website expenses, costs of participation in the Puget Sound Engineering Council, NCSEA and the NW Conference, board meeting expenses, or awards to our members.

We also just changed from a dues payment system where chapters collected both chapter and state dues and held the state portion of the dues for a year before remitting it to the state. That system made sense in the old days when chapters collected all the dues, but doesn't now that all dues are collected by the state, much of it via credit card payments on the state website.

The chapters no longer have that money as a cushion.

Half of the net proceeds from SEAW seminars are split back to the chapters based on member attendance. But for the last few years net proceeds have been low. For 2013 we're expecting them to be better, but we shouldn't count on uncertain income to fund our basic expenses and regular programs. Two years ago I suggested that a dues increase was likely to be needed. It looks like now is the time. The Seattle Chapter 2012 year-end balance of about \$11k is the lowest we've had since 2005. The 2013 budget predicts a slight improvement this year, but it wouldn't be prudent to wait another year and risk a crisis. The question now is do we increase the chapter dues by \$10, which, with our current paid Chapter membership of 577 would yield about \$6k annually, which may be enough for a few years, or do we propose a higher increase that would last longer? The Seattle Chapter board will be

grappling with this for the next few months.

Meanwhile the State Board has been working on implementing the strategic plan that was developed based on the membership survey. Board meetings are now organized around implementing members' ideas as incorporated into the plan. It's going well. Continuing education is a priority and two major seminars are planned for this spring and fall. Another priority is improving the website so it serves the members, committees, and the administrator better. Options for the new website include professional development of a custom designed site (at an estimated cost of perhaps \$30k, about \$40 per paying member statewide) or using a pay-as-you-go system that specializes in serving non-profit organizations (at much lower start-up cost). Either system is expected to include an integrated member database, event registration, committee interaction centers or forums, and link with bankcard proc-



essing. The goal is to make it more useful for all of us. Either way, it will take time and money to get it going.

After the 2005 dues increase, the state's financial surplus started growing slowly. In 2008 it increased dramatically as a result of the exceptionally successful 2007 NW Conference in downtown Seattle and a couple exceptional seminars. Since then SEAW State's surplus has been steadily declining, with a one-time boost last year caused by the change in dues payment system previously discussed. As treasurer, it's my opinion that 2014 is the time to also raise the state dues to avoid what is otherwise likely to become a crisis. So the State Board also has some decisions to make. I hope we all decide to raise the dues. In 2004 gas was \$1.88/gal. Compare the cost of an SEAW seminar to the ones available from NCSEA and ASCE. SEAW definitely deserves a little more in dues.

If anyone wants more detail on the organization's finances, feel free to contact me.

As always, please pay your dues promptly! Thank you.

*Ted Smith is a 35-year member of SEAW, and a principal of Smith & Huston, Inc. Email him at [Smith@smithhustoninc.com](mailto:Smith@smithhustoninc.com), or send typewritten snail mail to him at 8618 Roosevelt Way NE, Seattle, WA 98115.*



## \$3,000 Structural Engineering Scholarship

SEAW is offering a \$3,000 scholarship to a current college or university student majoring in structural engineering.

Applicants must be:

- ◆ U.S. citizen and resident of Washington State
- ◆ Senior undergraduate or graduate student
- ◆ Enrolled in a program of study majoring in structural engineering
- ◆ Having a commitment to making a career in the practice of structural engineering

Scholarship application materials are posted on the web at [www.seaw.org](http://www.seaw.org), and can be obtained by emailing [seaw@seaw.org](mailto:seaw@seaw.org) or by phoning 206/682-6026.

Application deadline for the 2013 award is March 31.

# In Memoriam

## Umesh Vasishth



October 18, 1930-  
December 28, 2012

SEAW Southwest  
President 1984

Born in Srinagar, India, Umesh Vasishth came to Seattle in 1955 after completing Bachelor of Engineering studies at the University of Mysore, then earned the MS from the University of Washington.

He went to work with Washington State Department of Transportation in Olympia, as Supervising

Bridge Engineer. He had the design responsibility for more than a hundred structures located throughout Washington, including several recognized by awards: Denny Creek Bridge, Cedar Street Bridge, and Mud Bay Road U-Xing. Other projects under his supervision: the Third Lake Floating Bridge and its approaches, Mt. Baker Ridge Tunnel, and Columbia River Bridge at Umatilla.

Following his retirement from DOT, Umesh founded Exeltech, an engineering consulting firm based in Lacey. He also taught engineering at Saint Martin's College, and served on the Washington State Board of Registration for Professional Engineers and Land Surveyors. Umesh was a Life Member of the Southwest Chapter of the Structural Engineers Association of Washington.

The SEAW Seattle Chapter *Equilibrium* is published monthly from September through May and is available online at [www.seaw.org](http://www.seaw.org).

Articles, letters, and announcements are accepted by e-mail to [seaw@seaw.org](mailto:seaw@seaw.org).

**Advertising rates (prepaid)** Help Wanted/Job wanted, max 200 words, \$65; Display ads: Quarter page, \$115; Half Page, \$150; Full Page \$190. 10% discount for ads running two or more months. Deadline is the 20th of the month. Contact SEAW for an advertising order form.

Except where noted, opinions expressed in this newsletter reflect those of the author and do not reflect or represent the position of SEAW. Portions of this newsletter may be reproduced provided credit is given.

## Robert J. Fossatti



September 17, 1936-  
January 22, 2013

Life Member 2009

Born and raised in Seattle, Robert Fossatti graduated from Cleveland High School, and in 1958 from the University of Washington with a degree in structural engineering. He served as an officer in the US Army Corps of Engineers.

This statement from Bob appeared on the Fossatti Pawlak website: "Since I was really good in math, the question became what type of engineer to be. During my freshman year, a professor told me that structural engineers work in a nice clean office, as opposed to civil and soils engineers who work in the mud and rain. Sounded good to me!"

Bob joined with Dean Ratti in the productive partnership known as Ratti Fossatti, whose projects included the 1984 restoration of the Mutual Life/Yesler Building in Seattle's Pioneer Square, pictured here. In 1986, Robert established Robert J. Fossatti and Associates (later RFA Structural

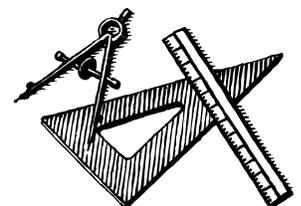
Engineers), working on projects in the Seattle area and abroad. He retired from active engineering in 2011, following service as engineer of record on some 4,000 buildings spanning six decades, 30 states, and two US territories. The May 2011 edition of SEAW Seattle *Equilibrium* featured projects by the Fossatti Group, including the Harvard & Highland complex in Seattle's Harvard-Belmont Historic District. In his last venture he took part in the firm Fossatti Pawlak Structural Engineers with long-time associates Pete Pawlak and Mark LaCasse.

Many prominent engineers credit their work with Bob as a strong point in their careers. His colleagues savored Bob Fossatti's kindness and generosity, his gregarious personality, and his hosting of an annual Columbus Day party.

An accomplished accordion musician, he played with The Physt River Troubadors and recorded three albums.

Bob joined SEAW in 1972, and achieved Life Member status in 2009.

His wife Jane of 53 years survives him, as do their children David, Dan, and Madalena.



## YMF Corner

-by Jenny Ahlport

Every year in February, students from kindergarten through high school, flock to the Museum of Flight to explore the exhibits put up by various engineering disciplines at the PSEC Engineers Fair. For the last four years I've been involved in this fair, and have talked to high school students trying to narrow down their degree for college, shy five year olds who edge up the table slowly to get a marshmallow or sticker, children who at 10 knew far more than I did about materials at 20, and many others. Every year it has been a unique and very rewarding experience.



Jenny Ahlport watching students build structures out of marshmallows and pipe cleaners at the 2012 fair.

This year's upcoming fair will be held [on February 9th, from 10am to 4pm](#). SEAW puts up a booth every year, with a hands-on exhibit for children to enjoy. We've put together a shake table, and provide pipe cleaners and marshmallows for the children to create their own structures. They get to put them to the test, and see how they fare against our table.

In addition to the simulated earthquakes, we also provide information about SEAW as a whole, specific projects (many parents and older students love to hear about your current assignment), and seismic safety, both on a global scale and in terms of what you can do in your home.

If you're interested in volunteering, please contact Tyler Kurz at [tkurz@dc-engineers.com](mailto:tkurz@dc-engineers.com) to get more information. We break up the day into two-hour shifts, and it has always been a highly enjoyable day for me. Additionally, if you have any material that you think would be interesting to include with the display, please let us know so we can try to incorporate it.



Lisette Terry using our homemade shake table to test the seismic stability of a student's bridge at last year's Engineers Fair.

Whether you're looking to volunteer at the SEAW booth, plan on taking your own kids to explore, or just want to drop by to see what it's all about, I hope each and every one of you finds your way to the Museum of Flight to check out this year's fair.

**The Performance Company**

**The PRESSURE GROUT COMPANY**  
More than 45 Years of Innovative Grouting

Densifying, Solidifying, Improving Soils  
Mitigation of Soil Liquefaction  
Tie-downs & Tiebacks/Anchors  
Thwarting Soil Settlements  
Stone Columns  
Vibrated Concrete Columns  
Rapid Impact Compaction

**206•621-0900**  
E-mail: [pgc@pressuregrout.com](mailto:pgc@pressuregrout.com)  
[www.pressuregrout.com](http://www.pressuregrout.com)

COMPACTON GROUTING  
CHEMICAL GROUTING  
LENS GROUTING  
PRESSGROUT PILES

## YMF Leadership

**President:**

Jennifer Ahlport  
[jahlport@gmail.com](mailto:jahlport@gmail.com)

**Vice President:**

Tyler Kurz  
[tkurz@dc-engineers.com](mailto:tkurz@dc-engineers.com)

**Social Representative:**

Krzysztof Zaleski  
[kzaleski@mka.com](mailto:kzaleski@mka.com)

**Past Chair:**

Natalie Low  
[gmatann@gmail.com](mailto:gmatann@gmail.com)

**Outreach Representative:**

April Shen [april.c.shen@gmail.com](mailto:april.c.shen@gmail.com)

Created in 2007, the Younger Member Forum provides networking and social opportunities to SEAW members 35 and under, as well as new non-member engineers and students. All SEAW members are welcome to participate in YMF functions.

### Upcoming YMF Events

- |        |   |
|--------|---|
| Feb 12 | Happy Hour, 5:00-7:00 PM<br>Thoa's, 96 Union St., Seattle |
| Mar 12 | Happy Hour, 5:00-7:00 PM<br>Triple Door, downtown Seattle |

AMERICA'S CENTER  
CONVENTION COMPLEX

St. Louis Missouri

EARN UP TO  
**27.5**  
PDHs!

# NASCC

## THE **STEEL** CONFERENCE

Incorporating the SSRC Annual Stability Conference and the  
Technology in Steel Construction Conference

April 17–19 **2013**

**LEARN. MEET. SEE.**

Join more than 3,500 structural engineers, erectors, detailers, educators and others involved in the design and construction industry when they gather this April at the NASCC: The Steel Conference, incorporating the SSRC Annual Stability Conference and the Technology in Steel Construction Conference. One registration fee includes all three conferences.

Learn from more than 100 specialized sessions on all aspects of steel building and bridge design and construction. Meet with the nation's leading designers, fabricators, and erectors. See the latest equipment and software in the 200+ booth exhibit hall.

sponsored by



**IMCA**

cisc icca



To view the advance program, visit

[WWW.AISC.ORG/NASCC](http://WWW.AISC.ORG/NASCC)

# Legislative Report

-by Tim Nordstrom, Legislative Committee Chair

The Washington State Legislature is currently in session. The following bills are being discussed in committees and could have ramifications for the members of SEAW if passed. If you are interested in any of these bills please click on the hyperlink for quick access to bill and the committee members.

Note: (HB = House Bill, SB = Senate Bill)

## HB 1231 "Establishing continuing education requirements for engineers"

DIGEST: Requires professional engineers to complete fifteen hours of continuing professional development every year for renewal of a certificate of registration.

<http://dlr.leg.wa.gov/billsummary/default.aspx?Bill=1231&year=2013>

**SEAW Legislative Committee Comment:** *When renewing our Professional Engineering License in the State of Washington, we will have to declare our continuing education.*

## HB 1420 & SB 5190 "Concerning public contracts for transportation improvement projects"

DIGEST: Modifies contract retainage, bond, and prevailing wage provisions governing contracts for transportation improvement projects.

<http://dlr.leg.wa.gov/billsummary/default.aspx?Bill=1420&year=2013>

**SEAW LC Comment:** *This bill could allow DOT Engineers to provide structural engineering on projects that provide no benefit or improvement to a state highway or to the public agency. For more information, click on the hyperlink and read sections 7 & 8 of the bill.*

## SB 5378 "Building Code Amendments"

DIGEST: Extends time requirements so substantial revisions to the building codes occur less frequently.

<http://dlr.leg.wa.gov/billsummary/default.aspx?Bill=5378&year=2013>

**SEAW LC Comment:** *This could push the frequency of code adoption in the State to a 6 year cycle in lieu of the current 3 year cycle.*

Click on the hyperlinks to:

- Read the actual bill
- Make comments to the committee members discussing the bill

# Meeting Recap—YMF Sponsored Evening

-by Karen Damianick and Peter Somers

The January Seattle SEAW Dinner Meeting was held at the UW Waterfront Activities Center and focused on our younger members. The evening started out with a firm showcase where nine local firms set up information tables to interact with the local student population. The participating firms included:

Coffman Engineers, Inc.  
Coughlin Porter Lundeen, Inc.  
DCI Engineers, Inc.  
Degenkolb Engineers  
KPF Consulting Engineers, Inc.  
Lund Wright Opsahl LLC  
Magnusson Klemencic Associates  
Reid Middleton, Inc.  
TetraTech/KCM

Attendance and participation were high for this portion of the event. Students left with a much better idea of the wide range of structural engineering opportunities available after graduation.

After the delicious Italian buffet, it was the students' turn to share the kinds of projects that they have been working on. It made me think of my senior group project and how glad I am that I only had to present it to professors and not to a large room of practicing engineers. Seattle University had three student teams present their undergraduate senior team projects to the assembly. These teams shared their project scopes and conclusions so far. The University of Washington was represented by two graduate students reporting on their research. The presentations themselves are summarized below.

## Seattle University

**Seismic Assessment of Bothell Control Building**—Kevin Aguilar, Phil Harezlak, Chris Padin

The Bothell Control Building is a one-story reinforced concrete building with a basement that was built in 1950 before detailed seismic provisions existed. The substation is a primary node in the Seattle City Light power system, as it is responsible for more than a third of the power supplied to Seattle. A preliminary study identified possible vulnerabilities of the structure, including lack of additional reinforcement at reentrant corners, unreinforced masonry partition walls, and large windows at the corners. The team is conducting a Tier 1 and 2 ASCE 31-03 seismic assessment of the structure and will provide SCL with a detailed cost estimate to mitigate any deficiencies.

## Diablo Dam Incline Lift Foundation Assessment and Rehab

—Ryan Blair, Nick Bleich, Tim Thorpe, Maxx Toyama

The Diablo Dam Incline Lift is part of the Upper Skagit Hydroelectric Project adjacent to Diablo Dam and is not currently in operation. A report by the Seattle Public Utilities Materials Lab has deemed portions of the concrete foundation material deficient. The team is providing a structural assessment of existing concrete foundation and, if needed, will develop a retrofit option and accompanying cost analysis for mitigating deficiencies. In addition, plans to reduce further deterioration of the existing concrete foundation will be developed. The final project deliverable will be recommendations for how to safely reopen the Incline Lift.

## South Substation Control Building Seismic Assessment

—Amethyst Hecker-Johnson, Leslie-Ann Jorge, Bobby Miller, Sean Morris

The South Substation Control Building is a reinforced concrete building that was built in 1937 before detailed seismic provisions existed. The building is an essential substation for Seattle City Light with critical ties to five other substations. Initial studies identified

weaknesses to due short columns and poor soil conditions, with liquefaction possibilities. The team is conducting a Tier 1 and 2 ASCE 31-03 seismic assessment of the structure and will provide SCL with a detailed cost estimate to mitigate any deficiencies.

## University of Washington

### A Pre-Tensioned Bent System for Accelerated Bridge Construction in Seismic Regions

Olafur Haraldsson (Advisers John Stanton and Marc Eberhard):

A new pre-tensioned bridge bent system is being developed at the University of Washington. The system consists of 1) precast technology that reduces construction time, 2) precast columns that include unbonded pre-tensioning that minimizes post-earthquake displacements, and 3) high-performance materials such as Hybrid Fiber Reinforced Concrete (HyFRC) that delays bar buckling and bar fracture. The new system is an outgrowth of an already developed non-prestressed precast bent system. A bridge bent using the non-prestressed technology was constructed successfully in Washington State in 2011. The work is funded by the PEER and FHWA.

### Structural Integrity of Steel Gravity Frame Systems: Connection Behavior

Jonathan Weigand (Adviser: Jeff Berman)

Steel gravity framing systems may be particularly susceptible to collapse when a column suffers damage that compromises its ability to carry gravity loads. To arrest collapse, alternative load paths must develop in a sustained tensile configuration resulting from large vertical deflections. The integrity of the system is contingent on the ability of the gravity connections to remain intact after undergoing extreme local deformation and strength demands. This study evaluates the resistance

(Continued on page 11)

# 2013 Engineering Fair

Sponsored by The Puget Sound Engineering Council

*Saturday February 9th, 2013*

*10:00 AM to 4:00 PM*

at the

*Museum of Flight Side Gallery*

*Seattle, WA*

9404 East Marginal Way South



## **A Free Event Open to the Public Special Activities for Kids K-12**

(Separate paid admission for access to the Museum of Flight is available but not required.)

The Engineering Fair is an annual event that is part of National Engineers Week, February 17 through 23, 2013. Engineering societies and colleges from around the Puget Sound will be available to talk about what engineers do. Engineering societies to be represented include aerospace, civil, electrical, industrial, manufacturing, mechanical, military, quality, welding, and more.

**Watch the ASCE Popsicle Stick Bridge Building contest!**



Visit [www.pseconline.org](http://www.pseconline.org) for more information on the Engineering Fair.



[www.pseconline.org](http://www.pseconline.org)

# Meetings, Seminars and Announcements

## EERI Annual Meeting Registration Open

Registration for the 2013 Annual Meeting of the Earthquake Engineering Research Institute (EERI) is now open online at <https://eeri.org/cohost/registration/eeri-2013-annual-meeting>. The meeting will be held February 12-15, 2013, at the Grand Hyatt Seattle, Washington, in the heart of Seattle's thriving retail and theater district, steps from Pike Place Market, the Seattle waterfront, and the Space Needle. With the theme "Building Resilient Communities through Policy and Mitigation," the meeting has much to offer engineers, scientists, emergency managers, and policy makers, highlighting earthquake policy issues while also offering insights from researchers and practitioners from around the country. A half-day pre-meeting workshop will be held February 11 on "The Canterbury Earthquakes—Lessons and Implications for Regions Worldwide."

Registration fees are \$575 for regular EERI members (\$750 nonmembers) and \$395 for EERI young professional, student, and retired members. For nonmembers who become EERI members, the fee is \$800. Single day registration options are also available at \$250 for EERI members/\$300 for nonmembers. The program brochure is available as a PDF on the above registration web page, which also has a link to make hotel reservations. Register today to take part in this program that will deepen and broaden your understanding of earthquake risk reduction, and where you will meet other leaders in the field!

## SEAW Earthquake Engineering Committee's Spring 2013 Seminar:

### Seismic Design Using the 2012 IBC and ASCE 7-10

The 2012 *International Building Code*, along with the 2010 edition of ASCE 7 *Minimum Design Loads for Buildings and Other Structures* will be adopted in Washington State in July 2013. This spring the

SEAW Earthquake Engineering Committee (EEC) will present a seminar on the revised seismic provisions of the 2012 IBC and ASCE 7-10. Topics to be covered will include system and analysis requirements; seismic design criteria; seismic hazards and the revised seismic maps; geotechnical engineering requirements; requirements for inspection, testing, and observation; design and anchorage requirements for non-structural components; and revised structural design requirements for structural systems, including concrete design, anchorage to concrete, steel design, masonry design, and wood and cold-formed steel design.

This day-long seminar will take place in Seattle on Saturday, May 11, 2013. Dates for Spokane and Pasco are being determined. Registration will include refreshments at breaks, a box lunch, and a notebook containing a printed copy of all seminar notes. Watch the Equilibrium and the SEAW website for further details!

## 2013 PNW Bridge Inspectors Conference: Maximizing your Bridge Inspection Program

Tuesday 4/23/2013 to Thursday 4/25/2013

Hilton Portland & Executive Towers, 921 Southwest 6th Avenue, Portland, Oregon

The Pacific Northwest State DOTs and FHWA are jointly hosting the 2013 Pacific Northwest Bridge Inspectors' Conference. The conference provides a forum for bridge inspectors and managers to share information, innovations, ideas, and best practices. Additional opportunity will be provided for the attendees to gain a current national perspective on bridge inspection from AASHTO and FHWA. The conference will provide continuing education for bridge inspectors.

### Who Should Attend?

City, county, state, federal, and consultant bridge inspectors and bridge managers who are responsible for:

- Bridge inspection policy and procedures
- QC/OA
- Preparation and maintenance of bridge inventories

- Bridge inspections
- Load ratings
- Bridge management systems

For information, visit <http://cm.wsu.edu/ehome/45069/76270/?&>

Bridge product and engineering service exhibitors are also encouraged to participate.

**National Engineers Week** will be February 9-16, 2013. SEAW's YMF typically participates at the Engineers Fair on Saturday 2/9 at the Museum of Flight. Refer to YMF Corner (page 4) for more information. Contact YMF President Jenny Ahlport [jahlport@gmail.com](mailto:jahlport@gmail.com), or Vice President Tyler Kurz, [tkurz@dc-engineers.com](mailto:tkurz@dc-engineers.com) to volunteer.

The **Seattle Science Festival** will be in June at the Seattle Center. SEAW teamed up with ASCE YMF on a booth last year. Watch for details.

## University of Washington to Host 2013 National Student Steel Bridge Competition

The University of Washington is excited to announce that they have been selected to host the 2013 National Student Steel Bridge Competition (NSSBC)! The competition will be held on May 31 and June 1, 2013, and is organized by both the American Institute of Steel Construction (AISC) and the American Society of Civil Engineers (ASCE). Student teams from approximately 45 universities from across the United States, Canada, and Mexico, that have qualified for the national competition by placing in the top two in their regional competitions, will be descending on Seattle for the NSSBC. It is estimated that more than 650 top civil engineering students will be visiting the UW and Seattle for the event, making this a great recruitment activity for local engineering firms. The teams compete with approximately one-fifth scale steel bridges on the basis of construction speed, lightness,

stiffness, construction economy, structural efficiency, and aesthetics.

The preliminary schedule includes a public display of all competing bridges and a chance to talk with the students on Friday May 31, to be held in Red Square on the UW campus, weather permitting, or in Hec Edmundson Pavilion. The competition itself will be held on Saturday, June 1, in Alaska Airlines Arena at Hec Edmundson Pavilion and will be open to the public.

In addition to hosting the NSSBC, UW will have its own steel bridge competition team composed of dedicated and determined civil engineering students. These enthusiastic students will spend countless hours throughout the school year in preparation for the competition through weekly team meetings for design considerations, moving forward to bridge fabrication and weekend assembly practices, and concluding with the competition itself.

The UW Student Steel Bridge Team will soon begin fundraising efforts to support the cost of hosting the NSSBC and SEAW Seattle Chapter has agreed to support them by providing advertising and in-kind support. There will be many opportunities for SEAW members and firms to both participate in the NSSBC and to show your support for the UW, including helping with organization, fundraising, and judging. More information is available at <http://www.ce.washington.edu/students/NSSBC.html>.

To get involved with NSSBC or to donate to the effort, send email to [nssbc13@u.washington.edu](mailto:nssbc13@u.washington.edu) and make sure to mark your calendars for May 31 and June 1, 2013!

-More events on page 10

Earn 6 AIA/CES CEHs or PDH credits free

# Seattle Wood Solutions Fair

FEBRUARY 27, 2013

Washington State  
Convention Center



With a full day of seminars and a trade exposition, the Seattle Wood Solutions Fair offers a unique professional development opportunity for architects, engineers and anyone else interested in wood's exciting design possibilities.

Choose up to six seminars from topics such as:

- Offset Diaphragms and Shear Walls
- Modular Wood Framing Goes Vertical
- Understanding the Design Requirements for Five-story Wood-framed Mid-rise Construction
- LCT One: Case Study of an Eight-story Wood Office Building
- Case Study: Wood Podiums in Mixed-use Design
- Glued Laminated Timber: An Innovative and Versatile Wood Product
- Case Study: Centre Pompidou-Metz
- Building Envelopes: Lessons Learned by a Commercial Contractor

Attendance is free to design and building professionals.

For more information and to register, **visit [woodworks.org](http://woodworks.org)**.



*WoodWorks is an initiative of the Wood Products Council,  
a cooperative venture of major North American wood associations.*



**Scan here to  
register at  
[woodworks.org](http://woodworks.org)**

WoodWorks is an approved AIA provider. 

Photos: Arch Wave Production, 3555 Hayden, Eric Owen Moss Architects, Tom Bonner Photography; Drs. Julian and Raye Richardson Apartments, David Baker + Partners; photo Bruce Damante

# Meetings, Seminars and Announcements Cont.

## MARK YOUR CALENDAR!

The Puget Sound Engineering Council (PSEC) will hold its annual Engineering Fair on Saturday, February 9th, at the Museum of Flight in Seattle.



The Engineering Fair generally has about 25 display booths, staffed by practicing engineers and technical people representing many types of engineering disciplines. In addition, the Fair also features a hands-on design competition on site (The Popstick Bridge Load Competition sponsored by the American Society of Civil Engineers). More information on the contest can be found at

[www.seattleace.org/ymf](http://www.seattleace.org/ymf).

The fair provides a fun, visible way to see and hear about the various types of engineering disciplines, as well as encourage students to think about engineering as a career. This is an annual event that coincides with National Engineers Week in February. The event is open to the public, with the target audience being K-12 students and their parents. There is no admission required to enter the fair, which will occur in the Museum of Flight's Side Gallery on Saturday February 11, from 10 AM to 4 PM. However, admission into the museum portion of the Museum of Flight is required.

To read more about national Engineers Week, see <http://www.eweek.org/>.

### Free Training on FEMA P-807, Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings with Weak First Stories

February 12, 2013, 9:00-11:00am  
Grand Hyatt Seattle

**Purpose.** The purpose of this Training is to introduce the FEMA P-807 report, Seismic

Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings with Weak First Stories, which was developed by the Applied Technology Council (ATC) under the ATC-71-1 project in 2011, with funding from the Federal Emergency Management Agency (FEMA). The FEMA P-807 report describes cost-effective retrofit procedures for a vulnerable class of buildings with a history of poor performance in earthquakes. Such buildings have weak ground stories with few walls, required to accommodate parking or commercial uses. The upper structure, with numerous walls, tends to be strong, but brittle. This relative weakness concentrates damage and deformations in the ground-floor story. These structures are prevalent in the seismically active regions of the Pacific Northwest and California. The FEMA P-807 report was developed to be easy to use while providing a practical and cost-effective means to reduce damage and the risk of collapse. Sophisticated and extensive nonlinear response history analyses form the technical basis of the report. However, the procedure itself is straightforward and prescriptive.

**Handouts.** Registrants will receive a hard copy of the FEMA P-807 report, Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings with Weak First Stories, and a CD-ROM containing a pdf of the FEMA P-807 report and includes the Weak-Story Tool.

**Presenter.** David Mar will present the training. David's work with ATC includes participation as the Project Technical Director on the ATC-71-1 Project, on the Project Management Committees of the ATC-98 and ATC-99 Projects, and was on the Steering Committee of the ATC-58-1 Project.

**Professional Development Hours (PDHs).** Each registrant will receive an electronic certificate documenting 3 PDHs.

**Training Date and Location.** The free training will be conducted on February 12, 2013, from 9:00 am to 11:00 am, in conjunction with the EERI Annual Meeting,

February 12-15, at the Grand Hyatt in Seattle, Washington. Persons interested in registering for this free training may do so online at the Events page of the ATC website: <https://www.atccouncil.org/events.html>

This training is provided as part of the National Earthquake Technical Assistance Program (NETAP) of FEMA. NETAP was developed as a mechanism for delivering direct assistance to the public to increase their knowledge and ability to analyze their risk, make a plan, and take actions aimed at reducing their earthquake risk and supporting overall community resilience. To learn more about this program and how to request training, please visit the NETAP website at <http://www.fema.gov/national-earthquake-hazards-reduction-program/national-earthquake-technical-assistance-program>

### Register to Attend 2013 Puget Sound Engineering Council Awards Banquet

The 55th Annual Puget Sound Engineering Council (PSEC) Engineering Awards Banquet will be held Saturday, February 16 2013 at 6:00 PM in the Skyline Room at the Museum of Flight at King County International Airport (Boeing Field). We invite you to join us for this unique opportunity to celebrate the profession of engineering and honor the achievements of our colleagues. Come early and enjoy complimentary access to the museum's exhibits. Tickets are \$65 per person, and may be purchased online at <http://www.pseconline.org/Events/AwardsBanquet/>

PSEC is pleased to host Dr. Jeff Williams, Co-founder, Senior Vice President and Chief Technology Officer of HaloSource, as our keynote speaker. HaloSource is a global company that develops clean technologies to disinfect and purify the water we drink, play in, clean with, and put back into our water systems. Dr. Williams' address will be titled, "An entrepreneurial Odyssey."

The HaloSource story began in 1998, when Dr. Williams assembled a strategic alliance of scientists and industry experts to make water better. He and the team have since built a world-class team of some of the most preeminent chemists, biochemists and microbiologists in the world, all working every day to make our world a better place through water, the most essential element for human life.

Prior to founding HaloSource, Dr. Williams was a professor of microbiology at Michigan State University for 26 years. He is an experienced consultant to the research units of major pharmaceutical companies, including Merck, Pharmacia, and Upjohn. He received BVSc and MRCVS degrees in veterinary medicine from the University of Bristol in 1964, and in 1968 he received his PhD in pathology from the University of Pennsylvania, where he was a Fulbright Scholar. He has published more than 200 scientific papers and book chapters in the fields of tropical and infectious diseases.

The evening's honors will include:

- 2013 Academic Engineer of the Year
- 2013 Industry Engineer of the Year
- 2013 Government Engineer of the Year
- 2013 Young Engineer of the Year
- 2013 Professional Engineer of the Year

PSEC offers its sincere thanks to The Boeing Company, Platinum Sponsor of the 2013 Banquet!

### NCSEA's New Winter Leadership Forum

Join Your Peers In Leading The Way

**The Winter Leadership Forum** is your opportunity to exchange ideas with leading structural engineers in an energetic and engaging environment focused on leadership, networking and game-

# Meetings, Seminars and Announcements Cont.

(Continued from page 10)

Designed to engage engineers at the top, and those on their way to the top, the Winter Leadership Forum offers two days of invaluable sessions, roundtables, and networking time. With sessions tailored to leadership, management, and planning in structural engineering, presentations will be delivered by thought-provoking leaders with plenty of opportunities for interactive discussion. **Share business ideas, successes and failures, with other structural engineering principals and benefit from the experiences of others.** [Click here](#) for more information and to register. ([http://ncsea.com/AnnualConferences/2013/2013\\_Winter\\_Leadership\\_Forum.aspx](http://ncsea.com/AnnualConferences/2013/2013_Winter_Leadership_Forum.aspx))

## The Details

When: Thursday, March 7 and Friday, March 8, 2013

Where: Tucson, AZ, at the Westin La Paloma

Conference price: \$995 (only \$895 for additional registrants from the same company and spouse rates run \$45-\$90)

Hotel room rate: \$179/night  
**Sleeping room rate expires February 9.**

## Job Sector Survey

Make your firm's voice heard by filling out the Puget Sound's annual [Job Sector Survey](#) (JSS).

The JSS project was established by regional economic development organizations committed

to providing elected public officials and policy makers with an on-the-ground assessment of the challenges and aspirations of all types of local employers. A full list of JSS project sponsors is listed below.

The survey is now in its third year. Last year, the survey received nearly 1,700 responses from 15 industry sectors. [The results](#) ([http://www.seattlechamber.com/Libraries/Reports\\_PDF/JSSReport2011.sflb.ashx](http://www.seattlechamber.com/Libraries/Reports_PDF/JSSReport2011.sflb.ashx)) were reported in major news outlets and personally shared with policymakers at all levels of government—from city and county councils to the Washington State Legislature and the U.S. Senate. By taking the survey, your business will be part of the next JSS report.

After you're done with the survey, feel free to pass it on to other colleagues. More participants provide for better results.

The survey link is: [https://www.surveymonkey.com/s/job\\_sector\\_survey2012](https://www.surveymonkey.com/s/job_sector_survey2012). Please note that all personal contact information will be kept confidential.

If you have questions, please feel free to contact JSS Coordinator [George Allen](#).

The 2012 survey is open to employers within a four-county region including King, Kitsap, Pierce, and Snohomish counties. The JSS is made possible by support from the Prosperity Partnership, Workforce Development Council of Seattle-King County, enterpriseSe-

attle, King County, Economic Alliance Snohomish County, Pierce County Economic Development Department, Kitsap Economic Development Alliance, Seattle Metropolitan Chamber of Commerce, The Seattle Times, and the City of Seattle's Office of Economic Development.

## SEAOC Call for Abstracts

Structural Engineers Association of California (SEAOC)

82nd Convention September 18-21, 2013

Hilton San Diego Resort & Spa, San Diego, California

Abstracts are requested for papers to be presented at the technical sessions of the 2013 SEAOC Convention.

We encourage submissions on recent projects, best design practices, new seismic systems and components, next generation codes, advanced analysis techniques, high-performance materials, sustainable design, and results of recent experimental testing.

Abstracts of not more than 250 words are due by 5 pm February 25, 2013, and should be sent via e-mail to the 2013 SEAOC Convention Technical Program Committee at the contact information provided below. Authors will be notified of abstract acceptance by April 5, 2013. Papers must be submitted for publication in the proceedings by 5 pm June 10, 2013. Authors will be provided with required guidelines regarding paper format after acceptance of abstract.

Charles Colvin, S.E.  
SEAOSD Technical Program Committee Chair

Phone: 619.299.5550  
Email: [ccolvin@burkett-wong.com](mailto:ccolvin@burkett-wong.com)

## MENTORS NEEDED!

PSEC University Mentor Night  
North Seattle Community College

Wednesday, March 6, 2013, 6:00 to 8:00 pm

College Center Building—1st Floor

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

The purpose of the mentor night activity has been to bring as many practicing engineers together with as many students as possible. We are trying to inspire the students, most of whom are freshmen and sophomores as well as high school seniors, toward a career in engineering. The mentor night allows engineers to relay their experience in the profession and answer questions posed by students. The event will be kicked off with a brief introduction of the engineering disciplines represented by the volunteers followed by a brief panel discussion with North Engineering Alumni. Following the panel discussion will be an open forum where the students visit various tables and converse with the mentors. Mentors are encouraged to bring a sample of work that will fit on a 30"X30" table top for potential discussion with the students.

If you are interested in participating, please sign up online at: <http://www.pseonline.org/Events/MentorNights> or contact Paul Grant at [pgrant@pangeoinc.com](mailto:pgrant@pangeoinc.com) Maps and further instruction will be sent out prior to the event.

Thank you for your support.

## Meeting Recap

(Continued from page 6)

and ductility of steel gravity connection sub-assemblages to loading consistent with interior column collapse by presenting results from a comprehensive experimental program that has been performed at the University of Washington. Opensees and analytical modeling approaches are also proposed that can characterize the force-displacement behavior of single plate shear connections under combined flexural and axial loading.

## Dues Were Invoiced in January!

### INSTRUCTIONS FOR PAYING YOUR DUES ONLINE:

1. Go to [www.seaw.org](http://www.seaw.org) and Log in to the member area (Default login name is your email address; password is your first name).
2. Click on "My Membership" in the menu bar
3. Select "Membership Renewal" in the gray menu bar to see if there is an outstanding invoice.
4. Select the invoice and Follow the prompts to pay your dues online using your VISA or Mastercard.
5. When your payment has been made, you will receive an automated receipt by email.

# THE CHRISTCHURCH EARTHQUAKES WORKSHOP: Response and Recovery Lessons from the 2010-2011 Earthquake Sequence in Canterbury, New Zealand

1:00-5:00 pm on February 12, 2013 at the Grand Hyatt Hotel, Seattle, Washington

The workshop brings a recent, relevant earthquake sequence to Seattle, as a vivid example of the impacts and opportunities that result when low-probability moderate earthquakes strike an urban area. By relating the experiences surrounding the earthquake sequence that struck the Canterbury New Zealand region in 2010-2011, particularly for the city of Christchurch, the workshop will provide lessons relevant to building more resilient communities. Targeted attendees include local public and private decision-makers and the 2013 EERI annual meeting participants.

## Program

### Overview of the Canterbury Earthquake Sequence and its Impacts

David Johnston, Social Scientist at the New Zealand Institute of Geological and Nuclear Science & Director of the Joint Centre for Disaster Research, Massey University 1:00-1:30

### Implications for Seattle and Other Urban Areas

Tom Rasmussen, Seattle City Councilman (invited) 1:30-1:45

### The Canterbury Earthquake Sequence Major Geologic and Social Impacts

Kelvin Berryman, Natural Hazards Research Platform Manager, Institute of Geological and Nuclear Science 1:45-2:15

### Impacts to the Canterbury Built Environment, Connections to Seattle

John Hare, Structural Engineer, Holmes Consulting, Christchurch 2:15-2:55  
Mark Pierepiekarz, Structural Engineer, MRP Engineering, Seattle 2:55-3:15

### Coffee and Discussion

3:15-3:45

### Response Challenges and Lessons

John Hamilton, Director, Ministry of the New Zealand Civil Defense 3:45-4:15

### Summary and Going Forward

Panel Discussion 4:15-4:45

### Workshop Highlights

4:45-5:00

### Questions and Discussion (Hotel Foyer)

5:00

**REGISTER** at <https://eeri.org/cohost/registration/christchurch-earthquakes-workshop>. Cost is \$30.



## SEAW Committee Corner (Visit [www.seaw.org](http://www.seaw.org) for updates)

The SEAW Committee Corner is dedicated to promoting greater communication between the membership and committees, and to encourage all SEAW members to become active participants in the committee(s) of their choice. Many committees are now using GoToMeeting web-conferencing software to facilitate remote attendance at meetings. Ask the committee chair for details.

Committee Name	Meeting Information	Topic(s)	Contact Information
<b>Building Engineering</b>	No information available.		Scott Beard, 253.591.5019 <a href="mailto:sbeard@cityoftacoma.com">sbeard@cityoftacoma.com</a>
<b>Disaster Preparedness &amp; Response</b>	Meets every third Tuesday. Next meeting 2/19, 12:00-1:00 (bring your lunch) Quantum Consulting Engrs., 1511 3rd Ave, #323, Seattle	Upcoming ATC-20/45 trainings; White paper: Engineer's Role in Disaster Response; SEAOC post-disaster response communications.	Joyce Lem, 425.450.6345 <a href="mailto:Joyce.Lem@hdrinc.com">Joyce.Lem@hdrinc.com</a> for remote access via GoToMeeting contact John Riley at <a href="mailto:jriley@quantumce.com">jriley@quantumce.com</a>
<b>Earthquake Engineering</b>	Next meeting in March	Working to prepare the seismic seminar for IBC 2012. Any interested person should contact Tom or Andy.	Tom Xia, 206.332.1900 <a href="mailto:txia@dc-engineers.com">txia@dc-engineers.com</a> Andy Taylor, 206.622.5822 <a href="mailto:andyt@kpff.com">andyt@kpff.com</a>
<b>Education</b>	Late February meeting date TBA 12 to 1:30pm at Lund Wright Opsahl, 1201 1st Ave S #310, Seattle. Phone conferencing available.	Roundtable discussion of future seminar topics and other continuing education formats	Ardel Jala 206.684.0573 <a href="mailto:ardel.jala@seattle.gov">ardel.jala@seattle.gov</a> Mike Wright, 206.402.5156 <a href="mailto:Mwright@lwo-se.com">Mwright@lwo-se.com</a>
<b>Existing Buildings</b>	TBD	ASCE-41 and various topics	Bryan Zagers, 206.343.0460 <a href="mailto:bryanz@cplinc.com">bryanz@cplinc.com</a>
<b>Legislative</b>	AELC Thursday meetings, 7:30am via conference call or at ACEC offices.	Upcoming bills in the current legislative session	Tim Nordstrom, 206.330.8055 <a href="mailto:timn@starseismic.net">timn@starseismic.net</a>
<b>Professional Practices</b>	To be announced		John Tawresey, 206.622.5822 <a href="mailto:johntaw@aol.com">johntaw@aol.com</a>
<b>Public Information</b>	Wednesday, February 13, 4:00 to 5:00pm via GoToMeeting (Contact chair for connection info)	Continue work on SEAW Facebook page.	Darrell Staaleson, 253.520.0388 <a href="mailto:dstaal@staaleng.com">dstaal@staaleng.com</a>
<b>Refresher Course</b>	Course to be held Tues/Thurs evenings Feb 5-March 19.		Mark Moorleghen, 206.332.1900 <a href="mailto:mmoorleghen@dc-engineers.com">mmoorleghen@dc-engineers.com</a>
<b>Scholarship</b>	No meeting scheduled. Scholarship applications are reviewed in March and April	Selection of SEAW Scholarship award recipients	William H Mooseker, 425.776.0646 <a href="mailto:cascade_bill@comcast.net">cascade_bill@comcast.net</a>
<b>Seattle Users of BIM Structural (SUBS)</b>	To be announced		Irina Wong, chair 206.262.9240 <a href="mailto:iwong@degenkolb.com">iwong@degenkolb.com</a>
<b>Snow Load</b>	No scheduled meetings.	Stay tuned!	John Tate, 509.972.3079 <a href="mailto:Jatce@charter.net">Jatce@charter.net</a>
<b>Sustainability</b>	Wednesday, February 27, 12:00 to 1:00 PM at Coughlin Porter Lundeen, 413 Pine St #300, Seattle	Update on projects (concrete, solar-ready roofs, European practices). Visit the committee blog at <a href="http://seawsustainability.blogspot.com/">http://seawsustainability.blogspot.com/</a>	Adam Slivers, 206.622.5822 <a href="mailto:Adam.slivers@kpff.com">Adam.slivers@kpff.com</a>
<b>Technology</b>	To be scheduled.	Work is progressing on database side of SEAW website. Meetings will be scheduled for design.	Steve Dill/Lynnell Brunswig 206.622.5822/206.682.6026 <a href="mailto:steve.dill@kpff.com">steve.dill@kpff.com</a> <a href="mailto:seaw@seaw.org">seaw@seaw.org</a>
<b>Wind Engineering</b>	No information available.	Chair Needed!	OPEN
<b>WABO-SEAW Liaison</b>	Thursday, Feb 14, 11:30 AM at Bellevue City Hall	Work on white papers continues.	Charlie Griffes, 206.285.4512 <a href="mailto:Charlie@ctengineering.com">Charlie@ctengineering.com</a>

# Employment Opportunities

## Senior Structural Engineer

Founded in 2012, **Lund Wright Opsahl** provides a balance of innovative structural design with tried and true engineering that gives clients the constructible, cost-effective structural solutions to meet or exceed their needs. We have assembled a team of professionals with a shared commitment to excellence in structural engineering and client satisfaction, and are currently looking for a new addition to the team.

We are looking for a **Senior Structural Engineer**. The ideal candidate will be an SE, will have ten to fifteen years of engineering experience and will have a demonstrated ability to manage project and staff. Excellent communication skills are a must; you will be providing guidance to staff engineers, as well interacting with clients. Salary DOE. This is a permanent, full-time position.

Please send your resume, salary requirements, and references to: Lund Wright Opsahl LLC, 1201 1<sup>st</sup> Avenue South, Suite 310, Seattle, WA 98134 or email to: info@lwose.com.

## Structural Engineer & EIT

**PTS** is a full-service site development company and one of the leading wireless A & E firms in the NW. Since 1999, PTS has earned a solid reputation for **on-schedule and on-budget delivery**, based upon a **track record building over 11,750 sites** across the nation. **We excel at fast turnaround schedules and precise execution.** Our approach is collaborative and results-driven and includes fluid communication, proactive planning and appropriate resource allocation along with highly responsive customer service. With offices in Seattle, Oregon, California and Arizona, our staff allows us to serve clients throughout multiple states and markets.

PTS is seeking a Structural

Engineer and an EIT

**Duties Include:** Analyzing, designing, planning, providing calculations and researching structural components and structural systems for building, steel platform, retaining wall and tower projects. Working with reinforced concrete, composite structure, timber, masonry and structural steel designs. Telecommunications infrastructure projects will be primary with some small building projects outside of telecommunications

**Desired Qualifications:** AutoCAD experience is highly desired

### Requirements:

Bachelor's degree or Master's degree specializing in Structural Engineering

SE Registration

Successful completion or current preparation for nationally administered exam, by the National Council of Examiners for Engineers and Surveyors

If interested, apply by submitting your resume via email to [careers@ptswa.com](mailto:careers@ptswa.com).

## Structural Project Engineers

**KPFF** Portland is looking for motivated structural engineers interested in opportunity for growth.

### Position

Structural Project Engineer

### Position Summary

As a Structural Project Engineer, you will work individually and collaboratively in the design - construction process for some of the most challenging projects in the Pacific Northwest, as well as nationally and overseas. You will work closely with talented engineers, BIM / CAD technicians, architects, project managers, contractors and client teams.

Our current projects include:

- Airports
- Arenas + Stadiums

- Long-Span Structures
- Bridges
- Government Facilities + Embassies
- Commercial Developments
- High-Rise Structures
- Mixed-Use Developments
- Corporate Campuses
- Healthcare Facilities
- Education Facilities (K-12 + Higher Ed)
- Museum + Convention Centers

### Qualifications

The preferred candidate will have:

- 3+ years of experience in structural engineering
- PE and MS / MEng engineering degrees
- Experience with Revit Structure
- Strong verbal and written communication skills
- Creative, proactive, and detail-oriented individual
- Outgoing individuals who thrive when working directly with architects, contractors and other engineers

### Apply

KPFF would like to hear from you. Please submit a cover letter and resume to [sharon.ellis@kpff.com](mailto:sharon.ellis@kpff.com). KPFF is an equal opportunity employer.

### Location

Portland, OR  
[www.kpff.com](http://www.kpff.com)  
[www.traveloregon.com](http://www.traveloregon.com)

## Structural Project Managers

**Andersen Bjornstad Kane Jacobs (ABKJ)** is a civil and structural engineering firm in downtown Seattle. We are currently looking for experienced Structural Project Managers for our Building Department.

Successful candidates will have a minimum of 5-10 years of building design experience that should include concrete, steel, and wood-framed structures. Experience with post-tensioned concrete is a plus. Applicants must have excellent verbal and written communication skills, be self motivated, and be able

to work in a team environment on multiple projects simultaneously. Salary DOE.

### Job Requirements

- BSCE required, MSCE preferred
- PE registration
- Experience with ETABS, SAFE, STAAD, RAM Structural Solutions Adapt, or other structural analysis programs

### ABKJ offers

- Medical, vision, and dental insurance
- 401(k) plan
- Life insurance
- Accidental death and dismemberment insurance
- Short-term and long-term disability
- IRS section 125 flexible spending account (cafeteria plan)
- IRS section 132(f) pre-tax commuter transportation benefit
- Company-paid licensing and professional society membership dues
- Paid vacation, holiday, and sick time
- Flexible working hours to accommodate commute

For more information on our firm, please visit

[www.abkj.com](http://www.abkj.com).

Interested candidates should e-mail a cover letter and resume to [hr@abkj.com](mailto:hr@abkj.com).

## Equilibrium Advertising Rates:

Help Wanted/Job wanted, 200 words, \$65.

Display ads: Quarter page, \$115; Half Page, \$150; Full Page \$190. 10% discount for ads running two or more months. Provide camera-ready art.

Deadline is the 20th of the month. Advertising order form is available on the Resources page of the SEAW website:

[http://www.seaw.org/resources\\_newsletter.cfm](http://www.seaw.org/resources_newsletter.cfm)



**STRUCTURAL ENGINEERS ASSOCIATION  
of WASHINGTON • Seattle Chapter**

PO Box 44 • Olympia WA 98507 • 206/682-6026 • [www.seaw.org](http://www.seaw.org)

**Seattle Chapter Committees & Chairs**

House/Program	Peter Somers
Refresher Course	Mark Moorlegghen
Newsletter	Lynnell Brunswig
Presentations/Awards	Cale Ash
Engineer of the Year	Ed Huston
Governance	Howard Burton
Committee Liaison	Tom Corcoran
YMF	Jennifer Ahlport
Seattle Users of BIM Structural	Irina Wong

**Statewide Committees & Chairs**

Code Advisory	John Hooper
Earthquake Engineering	Tom Xia
Building Engineering	Scott Beard
Existing Buildings	Bryan Zagers
Professional Practices	John Tawresey
Wind Engineering	Open
Scholarship	Bill Mooseker
Legislation	Tim Nordstrom

Education	Mike Wright (interim)
Finance & Auditing	Ted Smith
Disaster Prep/Response	Joyce Lem
Public Information	Darrell Staaleson
Sustainability	Adam Slivers
Snow Load	John Tate
SEAW Historian	Don Northey

For Committee contact information, visit [www.seaw.org](http://www.seaw.org) and click the Committee page

**SEAW Calendar**

**FEBRUARY, 2013**

Tuesday	5th	SEAW Refresher Course begins Tues-Thu Evenings through March 19
Saturday	9th	PSEC Engineers Fair, 10AM-5PM Museum of Flight, Seattle
Tuesday	12th	YMF Happy Hour, 5PM Thoa's, 96 Union Street, Seattle
Saturday	16th	PSEC Awards Banquet Museum of Flight, Skyline Room <a href="http://www.pseconline.org">www.pseconline.org</a>
*****		17-23 Engineer's Week
Wed	20th	Deadline for nominating committee to submit candidates' names
Wed	25th	March Newsletter deadline
Tuesday	26th	Seattle Chapter Board Meeting SEAW Dinner Meeting

**Membership**

**Membership Postings**

*In accordance with SEAW bylaws, membership applications are vetted by the Executive Director, granted probationary status by the chapter board, and posted for membership comment. Membership is considered accepted 30 days after posting if current year dues are paid and no member objections have been received.*

**Natalie Aguilar-Carranza**

Integrated Design Engineers  
UC Berkeley, BS 2011, MS 2012  
Class: Associate

**Emily Carlip**

Magnusson Klemencic Associates  
BS ARCE 2012, Cal Poly  
MS 2012, UW  
Class: Associate

**King H. Chin**

GeoEngineers Inc  
BS 1996, MS 2000, WSU  
Licensed PE, Washington  
Class: Member PE

**Katelin Crook**

Magnusson Klemencic Associates  
BSCE, 2011, Colorado State Univ.  
MSCE, 2012, Stanford  
Class: Associate

**Bill Davison**

University of Washington  
Student

**William (Bill) Leak**

BALES RESTORATION DKI  
BA 1974, UW/Foster School of  
Business  
CE Energy Audit 2010, Cascadia  
Class: Affiliate

**Rachel C Liberty**

T.Y. Lin International  
BS 2011, UW, MS 2012, Stanford  
Class: Associate

**Jacob Linke**

City of Seattle DPD intern  
University of WA  
Student

**Jake Menard**

David Evans and Associates, Inc  
BS 2001, MS 2003, Marquette Univ.  
Licensed PE, Washington  
Class: Member PE

**Juliette Peyroux**

Magnusson Klemencic Associates  
BSCE, 2011, UWMS Structural,  
UC Berkeley  
Class: Associate

**Eleanor Reynolds**

Magnusson Klemencic Associates  
BS 2009, MS 2011, U Texas at Aus-  
tin  
Class: Associate

**Georgi Stefanov**

MSc University of Architecture,  
Civil Engineering  
Class: Associate

**Scott Stewart**

KPFF Consulting Engineers  
BSCE 2006 University of Idaho  
MSCE 2007 Univ. of Washington  
Licensed PE, Washington  
Class: Member PE

**Karen Stoner**

CT Engineering, Inc  
Licensed PE, Washington  
Class: Member PE

**Angelia Tanamal**

Coughlin Porter Lundeen  
BS 2009, U of Illinois at Urbana-  
Champaign  
Class: Associate

**Alex Wiley**

City of Seattle DPD  
BSCE 2013, Univ. of Washington  
EIT, Washington  
Class: Associate

**Michael Ziemann**

DLR Group  
BS 2003, University of Washington  
Licensed SE, Washington  
Class: Member SE

**Member Classification Changes**

Robert Baxter	Member PE to Member SE
Jeremiah Bowles	Associate to Member PE
ARNOLD B CARSON	Member SE to Life Member
DOUGLAS CONDIT	Member SE to Life Member
Alex Habliston	Member PE to Member SE
Charlene Hails	Member SE to Non-Res Member SE
Greg Hess	Member PE to Member SE
Ethan Ramberg	Student to Associate
Dennis Titus	Member PE to Member SE
Brian Zagers	Member PE to Member SE

**Resignations**

Bret Brasher	Member PE
David Houchin	Member PE
Chad Taylor	Member SE