



EQUILIBRIUM

Newsletter of the Seattle Chapter
Structural Engineers Association of Washington

FEBRUARY 2008

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Coming in March

SEAW/ASCE

Dinner Meeting

Tuesday, March 25

SEAW hosts ASCE for a joint meeting featuring a program on green building.

Venue: McCormick & Schmicks on Lake Union

SEAW/ACI Washington Chapter JOINT Meeting & Program: Innovations in High Strength Concrete & Rebar

ACI hosts our annual joint meeting with a presentation featuring Escala, a 31-story condominium tower currently under construction in downtown Seattle. Escala is the first project in North America, and possibly the world, to utilize high-strength 100 ksi rebar for seismic confinement. Engineering News Record magazine recently featured this story and selected Cary Kopczynski & Company as one of the "Top 25 Newsmakers of 2007" for pioneering this development. In addition to 100 ksi rebar, Escala incorporates other interesting design and construction features which will also be presented. These include the use of 14,000 psi column concrete, a dual seismic system, and a column-hung forming system.

Cary Kopczynski, P.E., S.E., F.ACI is the CEO of CKC Structural Engineers. He is a Fellow of both the American Concrete Institute (ACI) and Post-Tensioning Institute (PTI), and an Honorary Member of the Wire Reinforcing Institute. He has been a member of ACI 318 for many years and chairs the PTI National Technical Advisory Board

Presented by
Cary Kopczynski
CKC Structural
Engineers



Meeting Information

DATE:	Wednesday, February 13, 2008
PLACE:	McCormick & Schmicks 1200 Westlake Ave N., Seattle
TIME:	5:30 - 6:30 PM Registration and Reception 6:30 - 9:00 PM Dinner and Program
COST:	\$45.00 - SEAW/ACI Members \$50.00 - SEAW non-member guests \$ 5.00 - Students
RESERVATIONS:	Please Note: RSVPs for this meeting go to ACI. Please make your reservation by email to spatterson@washingtonconcrete.org OR fax @ 206-878-6282 . Be sure to state your affiliation with SEAW and include your menu selection. (Do Not RSVP to SEAW for this meeting)
MENU:	Please select from the following choices: Chicken Marsala or Cedar Planked Filet of Salmon

FROM THE BOARD: Message From the Treas-

First a quick and hopefully not too boring financial report. Both the state and Seattle chapter are financially in good shape. The expense budgets are set to cover the expected costs of the organization's various activities with a bit of generosity to try to avoid going back to the board too often for additional funds. Budgeted income, on the other hand, is based mainly on dues: predictable and limited. That income is not enough to cover our expenses. We end up with a budgeted deficit. But wait... don't expect us to ask for a dues increase anytime soon. We have a couple aces in the hole. One is that some of the committees don't spend their budgets every year. For instance, last year the Wind Committee activities didn't result in much expense. A bigger factor is extra income. SEAW does seminars, or more accurately, our volunteers do seminars. In fact, SEAW does the most helpful and cost effective seminars I can imagine. But they're based on need and interest, rather than a rigid schedule, and the extra income from them is not consistent or predictable. Add to that the complication that most of the seminars are done by the state committees and a few are done by the chapters, and that half of

the state's excess seminar income is distributed back to the chapters and half of the chapters' excess seminar income is distributed to the state, along with the state dues payment in May of the following year. So it's difficult and rather pointless to try to predict them a year ahead of time for use in a budget that is primarily intended to manage spending. Hence the significant budget deficits without significant worries, as long as we maintain a reasonable cash surplus to carry us

Two handwritten math problems are shown side-by-side. The first problem is $7 + 8 = 15$. The number 7 is written with a dot above it and a line connecting it to the 8. The second problem is $2 + 9 = 11$. Both problems are written in a simple, child-like style with a horizontal line under the numbers and the result.

through the low points. So far we're doing that. The actual budget will be published in the summer's State version of the Equilibrium. Feel free to contact me if you have any questions about it.

As long as we're on the subject of dues, the 2008 electronic dues statements will be available on the website (seaw.org) soon. You'll get an email notification. Last year I thought I'd save SEAW some money by mailing my dues to save the credit card processing fee. It turns out the administrative cost of hand processing the check may be a little more than the card processing fee. So feel free to give the online system a try... the sooner the better. If you've lost track of your assigned username and password, contact Lynnell.

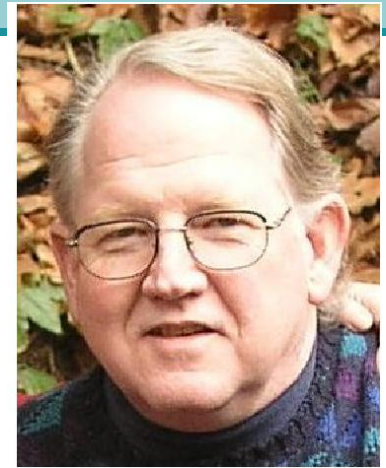
Where's the Math? Update

Last year my article was a bit of a rant about the state of

math education in Washington State. There has been a lot of action in the last year regarding the issue. Based on the 2007 report by Strategic Teaching, the legislature required that new math standards be developed. The firm and group of consultants selected to develop the new standards, at no small cost, seems to consist almost entirely of "fuzzy" math supporters, and has developed a draft set of standards. It is not too surprising to find that these stan-

dards, while addressing some of the concerns, do not seem to provide the change in direction needed with regard to math teaching in our state. They are still very focused on providing a unique standard for Washington State. Some might consider it reinventing the wheel rather than fully utilizing available successful examples.

Where's the Math? (WTM) and its supporters are not satisfied with these "Dana" standards and a group of WTM volunteers developed "Washington Exemplary Mathematics Standards: 2008". This document is clear, succinct, and easy to navigate. The standards are aligned with the "exemplar" standards of Indiana, California, Massachusetts, the NCTM Focal Points, Singapore, Finland and other documents as well. The good news is that our legislators reacted very positively to WTM's request that their



Exemplary Standards be compared and analyzed side by side with the Dana Center standards. The home page at www.wheresthemath.com includes introductory text and links to the WTM standards, the Dana standards, the Strategic Teaching report and lots of other related information. The WTM site also has a sample comparison showing the differences between the two standards for several items, just in case you don't want to review 200 pages of information to get the idea.

The graphic at left was copied from a page or two of such problems on one of my nephew's 2nd grade homework assignments last fall. When he started just writing down the answers, the teacher told him to put on his "dumb-hat" and do the problems by the intended method, counting the dots and circles. Hmmm.

Like I said last year, I'm no expert on math standards, but I've personally seen some problems with the current texts and teaching methods. It seems like dramatic progress is being made and if our legislators get enough public comments soon, we could get some dramatic improvements to the State's math standards. Public comment is making this happen! Your comments to your legislators will help. What's next? The science standards?

—Theodore E. Smith

The SEAW Seattle Chapter *Equilibrium* is printed monthly from September through May and is available online at www.seaw.org. Circulation by mail: approximately 550 copies. Articles, letters, and announcements are accepted by e-mail to seaw@seaw.org.

Advertising rates (prepaid, please): Help Wanted/Job wanted, \$50 ; Display ads: Quarter page, \$90; Half Page, \$120; Full Page \$150; inserts, pre-printed 8 1/2 X 11 inch flat, \$150. 10% discount for ads running two or more months. Deadline is the fourth Friday 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.

Meeting Recap

The Seattle Chapter of SEAW started off 2008 with the beginning of a potential new meeting format and the end of an old meeting venue. The January meeting was held over lunch in order to try something new and provide more options for our members. In addition, the January meeting was the last one held at the College Club building, which is scheduled to be demolished as part of a forthcoming redevelopment project.

During lunch the nominations were held for the nominating committee responsible for picking the slate of candidates for next year's vice president and new board members. The

slate of candidates will be announced by February 20th.

The afternoon's featured topic was a presentation on the seismic rehabilitation of the North Wing of the Harborview Medical Center by Bob Anderson of Magnusson Klemencic Associates (MKA). Harborview, located east of downtown Seattle on First Hill, is owned by King County and operated by the University of Washington (UW). The cast-in-place concrete building, constructed in 1973 and expanded in 1976, has a lateral system consisting of concrete piers and spandrels at the perimeter. A prior seismic evalua-

tion determined that the system, while very stiff, lacks sufficient strength and ductility to provide acceptable seismic performance. The analysis indicated that the shear-controlled spandrels were the controlling mechanism.

The goals of the rehabilitation project included improving the building to provide Immediate Occupancy performance for two-thirds of the Maximum Considered Earthquake, maintaining continuous operation during construction, minimizing the nuisance factor to patients and staff, and being cost effective.

As is common with buildings

of this type, the combination of a very stiff, yet weak system can create difficulties in adding lateral elements to improve performance, since the new elements need to be even more stiff in order to effectively reduce the seismic loads resisted by the existing elements. For this reason, MKA proposed using fiber-reinforced polymer (FRP) to strengthen the existing spandrels from the exterior. This approach eliminated the need to add new elements within the building and greatly reduced the impact to the operations of the building during construction.

(Continued on page 6)

In Memoriam: Bob Morrison Jr. 1948-2008



Longtime SEAW member Bob Morrison died January 14, 2008 following a courageous 7-month battle with acute leukemia.

Bob was the oldest of five brothers, born in Seattle on January 31, 1948. The family moved to Wenatchee when Bob was very young, and he attended Wenatchee schools through ninth grade. Bob was active in Little League and Babe Ruth baseball, making the All-Star

team as a catcher. Following the sudden and untimely death of his father in 1962, Bob's family moved to Cashmere, to join with the Wilson family in 1963. At Cashmere High, Bob participated in football and track and field and was elected student body president his senior year.

Bob followed in his father's footsteps and attended the University of Washington, graduating with a Degree in Civil Engineering. He

worked for various engineering firms in the Seattle area, as he earned his certifications and gained experience in the field. A long-time resident of the University District, Bob and two friends owned the legendary Blue Moon Tavern for over 20 years. In 1982, Bob met his future wife, Vivian and they were married in 1985. In 1995, Bob and Vivian purchased some property near Poulsbo, WA and established a home-based business, doing civil and structural engineering projects for clients such as the Port of Seattle and Todd Shipyards, completing more than 1500 projects in total. Bob had tremendous intellectual curiosity, digging deeply into topics that he found interesting, then moving on to another. Bob and Vivian gained relaxation and enjoyment working their land, growing a variety of fruits and vegetables. His greatest source of joy was their three grandchildren, Annika, Phoebe and Dylan.

A member of SEAW since 1981, Bob was a Seattle

Chapter board member and was a member of the Professional Practices Committee for a number of years. He succeeded Ray Fox as chair in 1998 and continued to serve in that capacity until this past year

Bob was preceded in death by his father, Robert L. Morrison, Sr.; step-father, Jack Wilson; and all of his grandparents. He is survived by his wife, Vivian; daughter, Lila and her husband Brian Sacksteder and their three children; and his mother, Marilyn Wilson of Cashmere. He will be missed and remembered by brothers, Brent (Kathie) of Chelan, Jon (Patti) of Monitor, Mike (Denise) of West Linn, OR, Jeff (Kim) of Wenatchee, Tom Wilson of Las Vegas, NV and Chris Wilson of Georgia; and sister, Sarah Wilson of Republic.

At Bob's request, there will be no formal services. Those wishing to express condolences are invited to contact family members or send a donation to a charity of choice.

Engineer's Week—February 16-23, 2008

PSEC -Puget Sound Engineering Council Coordinates Engineers Week Activities February 16-23, 2008

February 16 - 23, 2008

Founded in 1951 by the National Society of Professional Engineers, Engineers Week is celebrated annually by thousands of engineers, engineering students, teachers, and leaders in government and business. In 1988, the National Engineers Week consortium expanded its scope and now includes more than 100 engineering, scientific, and education so-

cieties and major corporations dedicated to promoting pre-college interest in math and science, and engineering as a career option. The Foundation also works to enhance the public understanding of engineering.

Traditionally, Engineers Week falls on the week of George Washington's Birthday. President Washington was the first military engineer and land surveyor, and is considered the father of the American engineering profession.

The purpose of Engineers Week is to highlight our profession to our commu-

nity, to honor significant achievements of our members, and to note the importance of our profession in the quality of life that our community enjoys.

The Puget Sound Engineering Council is an umbrella organization for many engineering organizations in this region, including SEAW and ASCE.

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YMF Corner: An Interview with Chad Taylor



Chad Taylor
Degenkolb Engineers
Current YMF Social Representative

Chad, tell us about your background. Where did you graduate? What types of activities were you involved with during college?

I graduated from WSU in 2003 (I'm thoroughly enjoying being a Cougar in the land of Huskies during our recent reign of football and basketball dominance) with a Bachelors degree and I received a Masters degree the following year from UC Berkeley. I was an officer for the student ASCE chapter at WSU

In this YMF corner I have interviewed Chad Taylor, the current YMF social representative. Chad has been active with the YMF for the past two years and has served as social representative since early 2007. As social representative, his responsibilities include: planning social activities, networking new members at SEAW meetings, and providing leadership within the YMF.

The purpose of these interviews is to help the membership get to know the YMF representatives. This summer we will be electing new representatives to the YMF leadership. Keep an eye out for future announcements and send me an email if you have any questions or would like to get more involved with planning and organizing YMF activities.

- Cale Ash - cash@degenkolb.com

- that really only meant that, two days out of the year, I was obligated to pick up trash on the side of the highway. At Cal, it seems my primary activity was getting buried by course work, although I was a student member of SEAONC.

Tell us about Degenkolb. How long have you been with the firm and what projects are you working on?

I've been working in the Seattle office for the past two plus years and I interned for Degenkolb in San Francisco while going to school at Cal. I am busy right now on the design of a new hospital in Arlington, the seismic upgrade of the LDS Seattle Temple spire in Bellevue, and the investigation and repair of the

damage caused by the tanker explosion at the Atlas Foundry in Tacoma. Degenkolb is a great company; if I've sparked any interest, check out our ad a couple of pages later in this newsletter.

How long have you been involved with SEAW and the YMF? What are some of the YMF social activities?

I became a member of SEAW in 2005 and have been involved in the YMF since then. We've been hosting monthly happy hours (location and time announced via email; if you're a young member and you aren't getting word, let me know and I'll get you on the list) in Seattle and Bellevue and we have been organizing technical field trips and meet ups. We are currently plan-

ning a hands-on demonstration for installing Hilti anchors.

Any advice for younger engineers considering involvement in a professional society such as SEAW?

Just do it. These organizations get better and better when more people get involved and voice their perspective. YMF is a great segue to involvement in SEAW: it provides a social setting for meeting colleagues from different companies, the time commitment is minimal, and it doesn't cost anything. We are totally open to new ideas and welcome everyone.

Engineers Week

(Continued from page 4)

Proclamations

Proclamations declaring Engineers Week start with a signing at the national level by President Bush, the state level by Governor Christine Gregoire, the County level by Executive Ron Sims and the City level by Seattle Mayor Greg Nickels.

A delegation of engineers including SEAW members Donald Northey, Ed Huston, and Paul Grant will attend the proclamation signing ceremony with Governor Gregoire on February 6.

Engineering Fair

**Saturday, February 16
10:00 am to 4:30 pm
Museum of Flight, in Seattle**

The Fair will be held Saturday, February 16, 2008, 10 am to

4:30 pm, in the side gallery at the Museum of Flight, Seattle.

The Puget Sound Engineering Council (PSEC) will be hosting the 2008 Engineering Fair in conjunction with local chapters of engineering societies and universities. The Engineering Fair generally has 20+ display booths, staffed by practicing engineers and technical people representing many engineering disciplines (e.g., mechanical, electrical, civil, aeronautical, material, etc.).

In addition, the Fair also features a hands-on design competition, The Popsicle-Stick Bridge (PSB) Competition, sponsored by the Young Members of the American Society of Civil Engineers. For more information on the PSB contest, visit www.seattleasce.org.

The Fair provides a fun, hands-on environment to see and hear about the various engineering disciplines, as well as encourage K-12 students to think about engineering as a career.

The Fair is open and free to the general public.

For more information about the PSEC Engineer's Fair visit our website at www.pseconline.org.

2008 Engineer's Award Banquet

The 50th Annual PSEC Awards Banquet will be held Saturday, February 23rd, at 6:00 PM in the Alani Room at Palisade Restaurant, in the Magnolia neighborhood of Seattle. This is a unique opportunity to celebrate the profession of engineering, and to recognize the ex-

traordinary achievements of our colleagues. Palisade features a breathtaking view of Seattle across the Elliot Bay, and an unforgettable dining experience.

Timothy M. Moore, P.E., S.E. will deliver the keynote presentation. Mr. Moore is a Senior Structural Bridge Engineer with the Washington State Department of Transportation, and he will be discussing the Design and Construction of the Third Tacoma Narrows Suspension Bridge, which opened on July 15th, 2007. He has 22 years of experience as a structural designer with the WSDOT Bridge & Structures Office, including 13 years as project coordinator for numerous bridge design projects.

PSEC Engineer of the Year Honorees:

Academic Engineer-of-the-Year

Professor Robert D. Holtz, PhD, P.E.

Nominated by the American Society of Civil Engineers (ASCE)

Industry Engineer-of-the-Year

Arlene McKeeman Brown

Nominated by the Society of Women Engineers (SWE)

Government Engineer-of-the-Year

Linda E. De Boldt, P.E.

Nominated by the American Society of Civil Engineers

Young Engineer-of-the-Year

Eric Herzstein, P.E.

Nominated by the American Society of Civil Engineers

Professional Engineer-of-the-Year

John D. Hooper, P.E., S.E.

Nominated by the Structural Engineers Association of Washington and the American Society of Civil Engineers

Engineering Educator-of-the-Year, The Kenneth W. Porter Award

Stan Baber

Awarded by acclamation of the PSEC Awards Committee

For more information, and a link to the PSEC Engineers' Asard Banquet registration page, visit

<http://www.pseconline.org/Events/AwardsBanquet/>

Engineers Honored



-Photo courtesy of Northwest Cement Producers Group

SEAW member John Arroyo of Northwest Cement Producers Group spotted this tribute at an east side entrance to New York City's Central Park. The name Engineers' Gate was given to the entrance to reflect the gratitude of the Park's designers to the engineers who constructed Central Park.

Meetings/Seminars

Two-part Seminar on Serviceability Considerations For Floor Systems: Design and Construction

Friday, March 14 — Part I
Friday, May 16 — Part II

Doubletree Inn, Seatac
18740 Pacific Highway S.
Seattle

Register now for the upcoming two part seminar being sponsored by the **Structural Engineering Association of Washington**. Speakers will share topics not specifically addressed by Design Standards relating to serviceability considerations in the design and construction of

steel and concrete framed structures. **Serviceability topics to be presented include, but are not limited to, vibration, short and long term deflection, camber, creep, shrinkage, construction tolerances, shoring and reshoring.** Presentations will also include practical case studies. A question and answer panel discussion will follow the presentations at each seminar.

Thomas M. Murray, P.E., Ph.D. is the Montague-Betts Professor of Structural Steel Design at Virginia Tech and is the first author

of the AISC/CISC Design Guide 11, "Floor Vibrations due to Human Activity". He has published many papers on the subject of floor vibrations and has presented seminars on the subject in numerous countries. Murray is a member of the American Institute of Steel Construction and the American Iron and Steel Institute specification committees, as well as, the AISC Committee on Manuals and Textbooks. He has received excellence in teaching awards from both the University of Oklahoma and Virginia Tech. In Feb-

ruary 2002, he was elected to the National Academy of Engineering.

Greg Schindler, S.E. is an Associate at KPFF Consulting Engineers. He has practiced structural engineering for 34 years and has been involved in the design of many major projects in the Northwest. A past President of both SEAW and NCSEA, Greg currently serves on the NCSEA Code Advisory subcommittee for Special Inspections and Quality Assurance, and is one of the editors of *Structure Magazine*.

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Meetings Recap

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Because of the uniqueness of this FRP application, a testing program was undertaken at the UW. The program involved five series of two representative spandrel configurations: the smaller spandrels at the east and west perimeter and the larger sections at the north and south perimeter. The first test involved a baseline test specimen representing the existing condition, which failed in a classic shear X-crack pattern. After a series of iterations using different FRP configurations and layering, the configuration used for the seismic upgrade consisted of several strips of single-layer FRP applied vertically on the spandrel and anchored to the concrete with FRP anchors on both sides of the expected locations of X-cracking. The rehabilitated specimens showed a displacement ductility of approximately two times the baseline specimens.

The results of the testing of both the current and retrofitted specimens were used for a nonlinear static (pushover) analysis to determine which spandrels required retrofit and, once retrofitted, to demonstrate acceptable seismic performance of the structure.

The construction, which involved applying the FRP and then covering them with a painted finish both for appearance and protection, was completed in 2007, and now the building is significantly safer without any major impacts to the ongoing hospital operations.

Peter Somers, P.E., S.E., is a Senior Associate with Magnusson Klemencic Associates and has been a member of SEAW since 2001. He serves on the Seattle Chapter Board of Directors and the Earthquake Engineering Committee.

Mark Your Calendar

February 2008

Wed 13th

Wed 20th

National Engineers week, Feb 17 – 23

ACI hosts joint meeting

SW Chapter Tradeshow

March 2008

Fri 14th

SEAW seminar series Part I: "Floor Vibrations - A Critical Serviceability Issue"

Tues 25th

Joint meeting with ASCE: Green Design

April 2008

Wed 16th

SW Chapter Hosts: Nucor Steel Mill

May 2008

Fri 18th

SEAW seminar series Part II: "Serviceability of Concrete Floors"

Tues 27th

Seattle Chapter Spring Social and Wine Tasting Evening Awards and Recognition Event

June 2008

21st - 22nd

SEA NW Conference: SEA of Idaho hosts.

Watch the SEAW website for Calendar updates!

Meetings/Seminars

Continued from page 6

Bijan Aalami, S.E., Ph.D. is a Professor Emeritus of Civil Engineering at San Francisco State University. For over three decades, Bijan has been a driving force in the structural design industry and has made significant contributions to the advancement of bridge and building design with software tools, design literature including numerous PTI technical notes publications, consulting, and training services. Dr. Aalami has been actively engaged in the design and construction of numerous notable post-tensioned buildings, and

special structures. Additionally, he has advanced the industry through worldwide educational seminars and extensive publications on concrete design. In 2003, the Post-Tensioning Institute conferred upon Dr. Bijan O. Aalami lifetime membership in recognition of his outstanding technical leadership and remarkable contributions to the post-tensioning industry.

A certificate will be available upon completion. For more information see the flyer insert or visit the SEAW website at www.seaw.org

NEES 6th Annual Meeting:

The Value of Earthquake Engineering Research

June 18 - 20, 2008

Portland, Oregon
Red Lion Hotel on the River
Jantzen Beach

Register Now And Submit Abstracts!

Early bird registration is now open for NEES's Sixth Annual Meeting. The event will be held on June 18-20, 2008 in Portland, Oregon at the Red Lion Hotel on the River, Jantzen Beach.

This year's event will feature high profile plenaries, informative breakout sessions, and networking opportunities. If you register by March 17, registration is only \$250 for NEES members and \$300 for non-members. Visit www.nees.org for links enabling you to take advantage of this reduced rate.

NEES is seeking presentations and posters of original research, laboratory innovations, and issues related to

practice. Submit an abstract to share your findings with fellow earthquake engineers and researchers from around the globe. We encourage presentations to discuss findings and the potential or actual impact of the research.

Abstracts may be submitted in the following tracks:

Implementing Research Innovations in Code, in Practice, and Beyond

Innovations in Structural Research

Innovations in Geotechnical Research

Next Generation Research & Experimental Techniques

Information Technology & Cyberinfrastructure Applications

Abstracts are due by March 1, 2008. For questions please email: annualmeeting@nees.org

News of Note

Hire New Employees in the New Year

Log on to NCSEA's new Career Center website to post positions.

Chicago, January 16, 2008:

The National Council of Structural Engineers Associations (NCSEA) is offering a solution to the word-of-mouth or mass-marketing approach in the search for qualified job candidates. A new feature to the NCSEA website, Career Center, offers a discounted posting rate to employers and free access to job seekers.

The new NCSEA Career Center gives employers and job-seeking professionals in structural engineering a better way to find one another and make that perfect career fit. For employers it offers a targeted audience of candidates, search option for resumes, and opportunities

to promote their company online. Employers can target their recruiting and reach qualified candidates quickly and easily. A simple online registration form is all that is needed to start posting jobs the same day.

Job seekers are encouraged to visit the Career Center to post their resume, search job listings, set-up Search Agents, and have new postings sent to them via email, all for free.

NCSEA Career Center is the premier electronic recruitment resource for the industry, where employers and recruiters can access the most qualified talent pool with relevant work experience to fill staffing needs. Visit <http://careers.ncsea.com/> to register with promo code "NEW08" for a 20% discount on job postings or review positions available.

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SEAW SCHOLARSHIP APPLICATION INFORMATION

SEAW is currently soliciting applications for its annual Scholarship Award. Announcements of the Scholarship program are being distributed to Engineering schools in the Western United States. Applicants must be U.S. citizens and residents of Washington State; a senior or higher ranking undergraduate, or a graduate student enrolled in a program of study majoring in Structural Engineering; and having a commitment to making a career in the practice of structural engineering.

The deadline for consideration for this year's award is March 1st

Scholarship application materials are posted on the web at www.seaw.org, and can be obtained by e-mailing seaw@seaw.org or by phoning 206/682-6026.

News of Note

(Continued from page 7)

FIRST Volunteer Opportunity

FIRST (For Inspiration and Recognition of Science and Technology) is a program developed by Dean Kamen (inventor of Segway scooter) to inspire and recognize the Science and Technology Heroes of Tomorrow. Teams of students are given 6 weeks and a common kit of parts to start from and asked to design and build a robot to compete against other teams of students in a game at a regional event. Teams that are selected at the regional events are invited to attend the Championship event held in Atlanta each year to compete against teams from around the world. FIRST has grown from a handful of teams to thousands of teams as of the kick-off event last week. The primary goal of FIRST is to identify, train, and support the "next-generation of problem solvers", namely future scientists and engineers. Along

these lines, students who participate in FIRST are eligible for approximately \$9 million dollars in college scholarships this year, and the amount of scholarship funds is steadily increasing.

One of the main benefits of FIRST is the strong mentoring partnership between Engineers and the students on a team. Teams are always looking for mentors to help them during the build season, people who are interested in improving society as well as encouraging future generations of students to enter Science, Engineering, Mathematics or other technical fields.

In addition, the State Planning Committee has a need for judges and volunteers to help with the Microsoft Seattle Regional Event that is being held at the Tacoma Convention Center on March 20-22. There are a number of different levels of involvement and time commitment so everyone who is

interested in participating should be able to find a position that meets their needs and time constraints. Volunteers would need to register in the FIRST Volunteer Information Management System (VIMS) at <https://my.usfirst.org/vims>.

And of course, anyone is welcome to attend the Microsoft Seattle Regional in Tacoma. The event is

free to the public and the teams are very excited that the teams will have an opportunity to "show-off" all their hard work at the end of another tough build season.

For any questions, please contact Monikka Mann at either (360)451-9458 or at mmann@stanfordalumni.org and I will do my best to answer any questions you might have.

SEAW SCHOLARSHIP FUND

Make a Contribution to the Future of Structural Engineering

Please help SEAW in its efforts to recognize excellent engineering students. Contributions to the SEAW Scholarship fund are accepted online by visiting the SEAW website at www.seaw.org. Look for "SEAW Scholarship Award" in the News box on the left side of the home page.

Now members can add a scholarship donation to their online dues payment. A link enabling an online contribution appears at the end of the dues payment process. Make your donation today!

Opportunities

Structural Engineer & Project Engineer

MLA Engineering, PLLC provides structural engineering design of new buildings and seismic improvements to historic structures. Our consulting and design services include engineering for local, regional and national projects. We have two engineering positions available: one suited for a candidate with 5 to 10 years of design experience and the second for a candidate with 15+ years of design and management experience. We design with all major construction materials, with an emphasis in concrete and steel build-

ing structures. A Master Degree is preferred for both positions.

Candidates who are motivated to use their technical, organizational, and communication skills and who work well with a small group of professionals will welcome this opportunity. Our work environment encourages creativity, teamwork, and growth. MLA supports and encourages and supports technical training. Other benefits include flexible work hours, medical, vision and dental health care plans, subsidized bus passes, matching IRA contribution, and vacation/holiday pay. Interested individuals please

contact Michael Leonard at email: mleonard@mlaengineering.com or write to the address provided below.

We look forward to hearing from you.

MLA Engineering, PLLC
1411 Fourth Ave, Suite 760
Seattle, WA 98101

Staff Engineers

Established and growing Structural Engineering design firm seeks outstanding individuals to fill immediate openings for Staff Engineers in our Seattle and Tacoma offices. All experience levels considered and

encouraged. We're a mid-size dynamic company recognized for our team work, creativity and innovation. Our informal studio setting facilitates collaboration and communication between all staff levels and departments. We combine a very progressive benefits package with a fun, flexible and casual office culture. Our diverse project teams and loyal clients provide opportunities to work with a variety of materials and building types. Benefits include medical, dental, vision, 401(k), cafeteria plan, subsidized transportation passes, three weeks vacation, paid sick

(Continued on page 9)

Opportunities

(Continued from page 8)

leave, paid professional development opportunities, testing and licensing reimbursement, paid volunteer time off, tons of office social events and much more. We've got a desk all ready for you. Come join our team!

Email resume to bbresko@swensonsayfaget.com or fax attention Blaze Bresko at 206 443-4870.

Structural Engineers

As a specialty engineering staffing firm in the Puget Sound region, we are currently recruiting for multiple Structural Engineer positions. Our positions are direct hire, full-time job opportunities. We represent a variety of reputable and established firms in this area. Our

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We are working with a leading international architectural and engineering consulting firm with over 9,000 employees worldwide in 86 offices. They are the lead designers of some very well known construction projects locally and worldwide. They have been voted one of the best places to work for in 2007.

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If you'd like more information on what we do, please feel free to contact me at sarahw@pugetsoundstaffing.com or 425-602-5768. I look forward to talking to you.

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For over a decade, WesTech has garnered a reputation as one of the top specialty recruiting firms in the Seattle area. Quick response time, honest communication and excellent customer service have been the principal standards guiding our business. We provide excellent opportunities for candidates within local manufacturing, engineering and IT companies.

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http://www.seaw.org/resources_newsletter.cfm

Or request by e-mailing seaw@seaw.org.

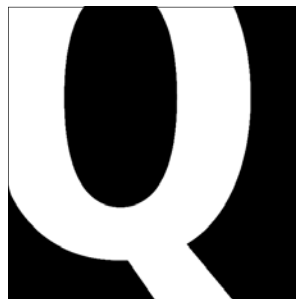
Help wanted ads must be purchased through the newsletter to be included in the SEAW online job board.



Routinely recognized as one of the best places to work, Degenkolb Engineers is actively recruiting structural engineers looking for a long-term career with a clear path to leadership and ownership. We encourage lifelong learning and support professional and community-based activities. Degenkolb engineers have the opportunity to follow their interests and develop their own book of work. And when we're not doing that, we are playing...sometimes in one of four company cabins in Tahoe, Big Bear, Monterey, and Sunriver. As renowned leaders in seismic and structural engineering, we offer a diverse, challenging mix of projects on both new and existing structures. Minimum requirements are an MS in Structural Engineering, excellent communication skills, and a desire to work in a challenging, collaborative environment. We have offices in San Francisco, Oakland, Los Angeles, San Diego, Portland and Seattle and are seeking engineers with all levels of experience. EOE

If you're interested in joining our award-winning firm, please contact: **Stacy Bartoletti, 415.354.6501**

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Please send cover letter and resume to Michael Schneider, VP Northwest Region via email at: Michael_Schneider@marxokubo.com Visit our website at: www.marxokubo.com

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