

STATEWIDE EQUILIBRIUM

July 2017

Annual summer newsletter of the Structural Engineers Association of Washington

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Engineer of the Year

The Seattle Chapter of the Structural Engineers Association of Washington (SEAW) has named Dr. Andy Taylor 2017 Engineer of the Year. The award was presented by past recipient Ed Huston at the June Spring Social and Awards Event held at the Lake Union Café in Seattle.

Prospective candidates are considered for their visibility to the profession that is favorable in the public eye, for their technical distinguished technical expertise and creative achievement, for their ability to encourage and nurture others in their professional development, and for their service to SEAW and the profession at large.

The award has been given for a variety of reasons, sometimes predominantly because of a particular project, sometimes predominantly because of a significant service, etc.

Andy fills the bill in each of the nomination categories, and he was chosen for the following reasons:

- Service to SEAW and the profession. Andy stepped down as Chair of the SEAW Earthquake Engineering Committee last year, after serving in that position for four years. Andy served on post-earthquake reconnaissance teams for: 1994 Northridge, 1995 Kobe, 2001 Nisqually Earthquakes, and the 2011 Tohoku Earthquake and Tsunami. He is also a frequent seminar presenter, both at SEAW seminars and at seminars for other SEA's.
- 2. Technical: Andy serves as chair of the American Concrete Institute's Committee 318 Subcommittee H on seismic provisions and is a member of the ACI Committee 374 for Performance-Based Seismic Design of Concrete. He is a Fellow of the American Concrete Institute.
 - Andy has done extensive work on base isolation and vibration and has authored or co-authored at least 11 technical papers in these subject areas.
- 3. Nurturing: Andy mentors younger engineers at KPFF, and is also an Affiliate Faculty member at the University of

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Jill Shuttleworth (SC) Meier Architecture -Engineering

Owen Bower (SC) Lund Opsahl

Bill Sandbo (SW) Peterson Structural Engineers Washington, where he teaches courses in reinforced concrete design and structural systems.

The Seattle Chapter of SEAW extends its thanks and congratulations to Andy Taylor, 2017 Engineer of the Year.

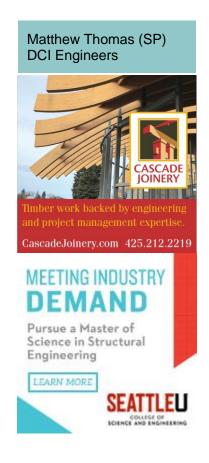


By Shalini Prochazka. Andy Taylor receiving Award as Engineer of the Year 2017. Left to right: Dr. Andy Taylor; Ed Huston.

Incoming President's Message By Chun Lau



It is a great honor and privilege to serve as this year State President! My wife and I moved to Seattle (Bellevue to be exact) in 1990 from Boston where I had been practicing for 5 years and just got my PE license in Structural after passing the 8 hours NCEES SE1 exam. So, when we moved here I thought I would be getting my PE - Structural license in Washington through comity application in no time. To my surprise, there was this 16 hrs. Structural exam called Western State exam that I need to take and pass to be licensed Structural Engineer in the State of Washington. I was given a PE in Civil through comity with my Massachusetts PE instead! I decided to take the SEAW refresher course to prepare myself for the structural exam and that was my first connection with SEAW. I joined SEAW as a member in 1994 and remain active with the association having served as instructor for the refresher course for 5 years, served as Director on the Seattle Chapter Board and participated with the wind committee on



the wind commentary to the Uniform Building Code. Through these participations, I came to realize SEAW truly is a member driven organization and our success highly dependent on the active participation of our members.

On April 1st, this year, SEAW current and past leadership met for a one day retreat for a review of the strategic plan that was developed in November 2011. "It was agreed that there was neither a desire nor a need to start the planning process from ground zero, but to build on the existing plan and focus on the most immediate issues or concerns that would best serve the Association and its members in the near term and over the next few years, with 2022 remaining as the target date for SEAW's vision." For more detail on the strategic planning retreat, please refer to report by Past President Ted Smith in this newsletter.

We have some good ideas and strategies developed during the retreat and for my personal goals as the State President this year, I would like to focus on the following areas:

- Attracting new membership
- Membership engagement
- Leadership development
- Maintaining active committees
- Providing continuing education opportunities through of seminars and workshops

I look forward to working with the new State Board of Trustees, Chapters' leadership and our members in accomplishing the above mission-critical areas. I am a realistic person and recognized that we may not have it all done in one year; let's at least put these into actions and work together to put SEAW on a path toward a new level of success.

Hope you all have a nice summer.

2017 Joint ASCE/SEAW Golf

Tournament

August 18, 2017 Willows Run Golf Complex 10402 Willows Road Redmond, WA 98052

Please join us August 18, 2017 for the annual golf tournament hosted by ASCE's and SEAW's YMF groups! Go to <u>ASCE's YMF page</u> for the tournament information.

Save the Date!

By Tyler Winkley

Joint SEAW/PEER Seminar on the TBI Guidelines Version 2.0 coming in late Fall 2017. Guest speakers featuring Jack Moehle, Ron Hamburger, CB Crouse, and more! Topics include Structural Modeling, Acceptance Criteria, and Case Studies. Join us! Read more

Seattle Chapter Outgoing President's Message

Outgoing State President's

Message



By Ted Smith

Fellow SEAW Members -

It has been a great honor to serve as SEAW State President this past year. Working with SEAW Leaders and members from all four chapters, both this year and the past 25 years as State and Seattle Chapter treasurer, has been an incredibly rewarding experience.

If you are not already involved in an SEAW committee, get actively involved in one, volunteer for a leadership position, help organize a seminar or a monthly meeting. It's a great way to get to know more about all facets of our profession and to advance the organization and the profession. I'm sure you will find it rewarding. Read more

Seattle Chapter June Spring Social Recap By Sean Augustino



On June 20th, SEAW held our annual end-ofyear dinner and social at Lake Union Café in Seattle's Eastlake neighborhood. This was a great chance to see familiar faces and reflect



By Cary Kopzscinski

With the 2016/2017 SEAW year now in the rearview mirror, I'd like to take this opportunity to review our many accomplishments and thank the people who were instrumental in helping achieve them.

Our accomplishments this year did not come without a struggle. Lynell was more difficult to replace than SEAW leadership anticipated. This realization came into full focus as we transitioned to our new administrative team. In hindsight, I suppose that a major administrative change was bound to create some bumps in the road. Lynell had become SEAW's "go to" person and was hard to replace. Nevertheless, replace her we did, and the gears between our new administrative team and the SEAW leadership meshed steadily better as the year wore on. We finished strong. Read more

Scholarship Winners

By Kevin Solberg



Join us in congratulating our scholarship winners! Read more

on SEAW's journey over the past year. Programming included presentation of the President's Awards, 3 Life Memberships, 4 Scholarships, and the Engineer of the Year Award. Outgoing Chapter President Cary Kopczynski then handed the gavel to incoming President Chun Lau, and the new board for the upcoming year was announced. Chun laid out his reasons for being optimistic about the upcoming year in SEAW, and solicited input from members on what the Association can be doing for them. Read more

SEFW News

By Mark D'Amato

The Structural Engineering Foundation of Washington (SEFW) had an exciting 2016-2017 year.



The 6th Annual Fall Forum was held November 10, 2016 at Benaroya Hall in Seattle. More than 250 people were able to enjoy the reception and lecture, "Engineers, Architects, Builders: A Legacy of Innovation in the Pacific Northwest." The event featured main presenter and moderator Tyler Sprague, Ph.D., Assistant Professor at the University of Washington, and panelists Carla Keel, Carla Keel Group; David Miller, Miller Hull Partnership; Scott Redman, Sellen Construction; and Jon Siu, City of Seattle. Additionally, SEF was pleased to welcome special guest Dan Evans, former Washington Governor, U.S. Senator, and a career structural engineer. The evening featured an enlightening and even personal conversation among the group about the history of engineering and building design in Seattle. Read more

NCSEA Annual Report

By Chun Lau

The National Council of Structural Engineers Associations (NCSEA) is now in its 25th year of existence, and is currently comprised of 44 regional or state structural engineering associations throughout the United States. SEAW was a chartered member at the inception of the Council and has been one of the larger Member Organization (MO) with our membership at 800+. Read more

Outreach Committee Report

By Pete Opsahl, Chair



For the past three years SEAW has been working with local area STEM high school programs. This year the newly formed Outreach Committee has continued this effort by participating in several STEM programs. The following is a summary of the Outreach Committee's accomplishments thus far:

For the third consecutive year YMF members Gino Mazzotti and Brent Olson supported the Mountlake Terrace HS Bridge Building class. Students designed, built, and then tested their bridges by subjecting them to increasing weight increments until failure; some bridges held several hundreds of pounds. Read more

Sustainability Committee Report

By Kyle Steuck

In the past year the Sustainability Committee has focused on the carbon impacts related to building construction. With the introduction of



LEED v4 and other life cycle analysis requirements, the amount of data available on carbon and other environmental impacts has exploded over the last year. Most of this data comes from Environmental Product Declarations, or EPDs. The committee has assembled a list of EPDs available locally on our website (link). This resource will be expanded through collaboration with the Embodied Carbon Network hosted by the University of Washington, which is linking multiple efforts to curate similar lists. Read more

Earthquake Engineering

Committee Report

By Kai Ki Mow

The SEAW Earthquake Engineering Committee (EEC) has had another active year engaging the local structural engineering community in conversations and technical discussions on current technical development and public policy issues. The current EEC membership stands at 20 voting members and a growing corresponding membership of around 120 members. Read more

Disaster Prep/Response

Committee Report

By Joyce Lem, Chair

Committee Contacts:

Chair: Joyce Lem (joyce.lem@hdrinc.com), Past-Chair: Paul Brallier

(pbrallier@HNTB.com)

Meetings are held on third Tuesdays of the month, Noon - 1pm, at Quantum Consulting Engineers, 1511 Third Ave, Suite 323, Seattle.

We are a very active committee and proud of our accomplishments this past year. That said, we have a lot of work to do during the upcoming year and extend a warm welcome to new members. Read more

Public Information Committee

Report

By Darrell Staaleson

Our focus has been on continuing to make improvements to Equilibrium.

Created a Review Checklist in Excel to collect articles submitted, give assignments for making reviews, and track that reviews are complete.

Created a Newsletter Format in Word so that Sections are clear and articles are placed in the correct section. Read more

Technology Taskforce Report



Have you been on the SEAW webpage and thought it was missing something? Have you been on other association's websites and wished that SEAW had some similar features on its own website? Now is your chance to have a say in the direction of www.SEAW.org. The SEAW Seattle Chapter's board of directors has started a taskforce group to explore different features the webpage could and should have, and look at different layout

Wind Engineering Committee

By Scott Douglas

Report

The SEAW Wind Engineering Committee (WEC), with 42 members on the mailing list, has continued to meet regularly every two months, typically on the third Thursday of every month, in downtown Seattle. All WEC meetings are broadcast over Go-to-Meeting, thus if SEAW members are not able to participate in person they are encouraged to participate remotely. Once again members of the South Central and the Spokane Chapters, who still have no representation on the WEC, are encouraged to participate. Read more

Membership Task Group

SEAW State Board is currently trying to reactivate the Membership Task Group. The purpose of this task group is:

- Measure current participation in SEAW activities using information from SEAW database
- Help the chapters track the membership of the chapters with the goal that the chapters may retain members and obtain new members.

This task group was identified as needing to be reactivated during the strategic planning session recently. In order to be effective each chapter must have at least one representative on this Task Group, more are welcome. Please contact Jill Shuttleworth if you are interested in joining this group. JTShuttleworth@meierinc.com or 509-840-3343.

Scholarship Committee Report

By Kevin Solberg, Chair

The Scholarship Committee has been active over the past year promoting the SEAW scholarship to university students, reviewing applications, and interviewing candidates. Current membership consists of Siri Ashworth, Jessica Jenness, Bill Mooseker,

options and website styles. If you have any input of your own for the direction of the SEAW webpage; please feel free to email it to me at mwiese@integrusarch.com. Please use the headline "SEAW Technology Taskforce" in the headline so it will be easier for me to sort out.

Continuing Education Committee

Report

By Adam Silvers, Chair

The Education Committee is looking for more members. The committee organizes technical seminars for SEAW. Last year they hosted a 6-hour seminar on the 2015 IBC that included speakers covering updates to all material standards. One highlight was SEAW and ACI 318 committee member Andy Taylor explaining the reorganization of the ACI 318-14 Building Code. What other organization can boast such an expert Read more

Seminar: Engineering the Future

39th IABSE Symposium September 21-23, 2017 Vancouver, BC, Canada

Themes:

- 1. Innovations in Structures
- 2. Existing Structures Into the Future
- 3. Performance Based Design View the flyer

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. Read more

Dave Peden, Ben Piermattei, and Kevin Solberg. The committee reviewed eleven applications in March for the 2017 award. The students were from UW (6), WSU (3), Gonzaga (1), and Seattle University (1). Four candidates were shortlisted and interviewed in April. The committee unanimously voted for four candidates to receive a scholarship award. One candidate was awarded a full \$5000 scholarship, the other three candidates where awarded partial scholarships. The committee generally meets via conference call at various intervals throughout the year, with the busiest time between December and April. The committee conducts candidate interviews in Seattle and/or Spokane member offices.

Employment Opportunities

Sr. Structural Engineer - MLA Engineering, PLLC

Structural Engineer - Seattle - CT Engineering

Business Development/Sales - Structural Steel Industry - American Institute of Steel Construction

Structural and Design Engineers - Lund Opsahl, LLC

Read more

From the Editor

By Darrell Staaleson

Equilibrium publication Team:
Darrell Staaleson, Editor
Tim Nordstrom
Zohrah Ali
Allison Tran - Grammar, spelling, and
watching out for you'll-never-believe-how-theyspelt-that!

ACTION ITEMS:

- 1. All members are welcome to submit articles to Equilibrium. To help you with your writer's block, here are a few topics: Write Engineer's Notes from Afield, summarize an interesting technical design you worked on, write about how you have been successful and increased productivity with an accounting procedure or marketing technique, write about your experiences in community services, or share some construction site photos and talk about lessons learned.
- 2. "A Picture and a Paragraph." And please use the Article submittal form provided. Please note that when I say, "picture" I mean an actual "picture" and not a blank space where the "picture" should be. And the picture needs a caption along with the names of the people in the photo.

Quiz:

What novel has this quote? And who is the author? "We spent the first part of our voyage pumping out water to keep from drowning and the second part of our voyage pumping in water to keep from burning." First to respondwith a correct answer - will get coffee and a Danish.