



STRUCTURAL ENGINEERS OF COLORADO NEWSLETTER

**2022 SPRING SCHEDULE
SIGN UP FOR THESE EVENTS
AT
[HTTPS://
SEACOLORADO.ORG/](https://seacolorado.org/)**

SEAC/CAGE Meeting

January 20, 2022
Doubletree Westminster
and Virtual
7:45am-9:00am

PE/SE Kick Off Meeting

January 26, 2022
Virtual
5:00pm-6:00pm

Business Management Meeting

February 10, 2022
Via Webex
7:30am

January General Meeting

SEAC January General Meeting with CAGE

January 20, 2022

Doubletree Westminster and Virtual (begins at 8AM)

Registration and breakfast: 7:30am

Program: 7:45am-9am

*Seismic Surveys for Vs30 IBC Seismic Site Classification
and Denver-Metro Measurements*
1 PDH

PRESENTATION: Seismic investigations have been used in resource exploration since the early 1900's, however they were not used for engineering projects until the late 1970's. Their use started gaining prominence in 1984 with the first ASTM test standard for any geophysical test. The Uniform Building Code (UBC) furthered the use of measuring in-situ P- and S-wave velocities on a site-specific basis domestically; and now, its application has become routine through specifications in the International Building Code (IBC), first released in 2000. Drilling and SPT N-values remain as the primary approach used by engineers for IBC site classification, but in the last decade a few advancements in the geophysical industry have allowed seismic investigations to confirm, and support drilling results using fewer and shallow(er) borings to derive the seismic site classification. The presentation will discuss the progression of seismic methods for engineering use, with emphasis on site classification as specified by the IBC standard. Determining a Vs30 value based on borehole and surface seismic methods will be explained as additional rational to apply these methods, particularly in cluttered urban settings. Using the Denver-Metro as an example, we will take a close look at where Vs30 values have been measured, and what the results mean on a broad scale to geotechnical engineers working with designers (at a metro-wide scale). In addition, a large-scale front range project where Vs30 and borehole data were acquired, will be compared and presented. Time permitting, a few other advancements illustrating the value of collecting these 1D Vs30, or 2D Vp & Vs seismic profiles, or 3D volumetric measurements to characterize the subsurface for engineering design needs will conclude the presentation.

SPEAKER: Mr. Sirles received his bachelors in Geology in 1980 at Fort Lewis College, Durango, CO; and masters in Geophysics in 1985 from Mackay School of Mines - Univ. Nevada-Reno. Phil is Collier's Operations Manager (for western operations), Sr. Geophysicist and Business Development Manager. Phil proclaims himself as an engineering geologist using geophysics to help clients solve geologic, hydrologic and engineering problems. He started his career with 10 years at the Bureau of Reclamation, and has been a consultant for 26 years, a total of 36 as of January 2022!

He has conducted engineering geophysical investigations domestically in 46 of 50 states, and internationally in 6 countries. He has authored over 60 papers on a variety of subjects. He is a proud Colorado Native, but much more proud to point out locations throughout Colorado where he scrambled hill-and-dale to acquire geophysical data for various projects!



PRESIDENT'S MESSAGE

Structural Engineers Association of Colorado

I am excited and honored to serve as your 2022 SEAC President. Having been on the board two years now I can better see all the contributions and efforts by those before me that have continued to make SEAC a vibrant, successful, and helpful organization for our profession. A very big thank you is owed to all who have been on the board, chaired committees, been active members of committees, volunteered, and who have been active members of SEAC over the years. A special thanks goes to the two board members who finished their terms last year, Chad Mitchell and Mike Piper. I also want to congratulate and introduce you to our new board members. Sara Mickus is our new Director and Scott Hargrove is our new Secretary. We're all excited to have them join the Board.



As we start the new year it is natural to look back on what we've accomplished. In 2021 we again all dealt with Covid and at SEAC we found ways to merge in-person and online events to accommodate as many participants as we could. The annual meeting made a triumphant return. We made large strides toward updating our Strategic Plan. Our committees once again shined with the Fall Seminar, the Gingerbread Bridge, working towards a Seismic Position Statement, white papers and a presentation from the Steel Committee, continued development of the SE3 Committee, growth of the new Southern Colorado Committee, an increase in our social media presence, and so many more great efforts by all of our committees and members.

We have participated with the new National marketing campaign to advance the Structural Engineering profession. Be sure to check out and follow www.weseeaboveandbeyond.com. The more of us that share this campaign with our friends and colleagues the more it benefits us all. Thanks to Julian Lineham for being the SEAC ambassador for this campaign. A special thank you as well to Jeannette Torrents for being our NCSEA delegate and our link to the National Organization. Don't forget that your SEAC membership also gives you a membership with NCSEA which comes with many benefits!

In 2022 we look forward to improving the social and networking aspects of both in-person and virtual meetings; finalizing the strategic plan; adding new committees; increasing the public visibility of SEAC; increasing our outreach to future engineers; continuing the great work of all of our committees; increasing membership locally and across the state; increasing involvement from all members; advancing the national marketing campaign on a local level; and so much more.

I encourage everyone to look at our current list of committees and think of a way they can help you in your day-to-day work. We all know not every situation fits neatly in a code book and one of the great benefits of our organization is that we have committees ready and willing to help you with those situations. If you have a question they haven't seen before they typically will help you find an answer or at least share it with others for a collaborative look. I also encourage you to volunteer for an existing committee or if you have an idea for a new one, reach out to your board!

I look forward to another exciting year with SEAC and all of you. I hope to see you in-person or online for our January joint meeting with CAGE. We'll be learning about shear wave velocity testing and all the things it can be used for in addition to seismic site classification.

A handwritten signature in blue ink, reading "B. Lobmeyer". The signature is fluid and cursive, with a large initial "B" and a stylized "Lobmeyer".

Brian Lobmeyer, PE
SEAC President

BOARD OF DIRECTORS

Structural Engineers Association of Colorado



Brian Lobmeyer

President

Anchor Engineering Inc.

303-783-4797

president@seacolorado.org



Holly Janowicz

VP/Treasurer

BYLD, Inc.

720-257-4468

vp@seacolorado.org



Scott Hargrove

Secretary

Knott Laboratory

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Lacey Goetz

Past President

Integral Engineering

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Sara Mickus

Director

Evolve Structural Design

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director3@seacolorado.org



Jeff Borger

Director

Jirsa Hedrick

303-839-1963

director1@seacolorado.org



Kim Olson

Director

Nucor

303-720-4076

director2@seacolorado.org

We Want to Hear from YOU! The SEAC Board of Directors is interested in hearing your suggestions, comments, and ideas. Please feel free to contact a member of the BOD at any time.

Thank you to all of our members who continue to support SEAC!

ANNOUNCEMENTS

Structural Engineers Association of Colorado

Membership Renewals

Renew your membership online by January 31st in order to maintain access to all of your membership benefits such as:

- 20% Discount on 80+ publications including the 2018 IBC, ASCE 7-16, 2015 NDS, and ACI 318-14.
- Discounted prices for NCSEA Webinars and SE Exam Review Course.
- STRUCTURE magazine subscription
- Structural Connection subscription
- SEAC Newsletter with structural engineering position advertisements, industry developments, and notification of upcoming events such as Young Member Group Happy Hours, Project Presentations, Job Site and Plant Tours, Breakfast Meetings, and Seminars.
- Free live web broadcast of general meetings for out-of-area members.
- Access to recordings of past general meeting presentations.
- Bimonthly breakfast meetings with an opportunity to earn PDHs and network within our industry.
- Discounted prices for the Fall Seminar and Annual Dinner.
- Opportunity to participate in technical and professional committees that shape our profession on topics from code development to business management.

If you have not received a dues notice, need to correct your local or out-of-area status, or want to upgrade your membership type, please contact SEAC at administrator@seacolorado.org.

SEAC COMMITTEES

Structural Engineers Association of Colorado

Have you considered joining a committee?

Your participation is what makes our organization so successful.

Committee	Chairperson	Contact Phone	Board Liaison
BIM	Alejandra Contreras Moreno	(303) 945-0729	Brian Lobmeyer
Building Dept. Liaison	David Johnson	(970) 443-7455	Scott Hargrove
Business Management	Tom Soell	(303) 444-1951	Lacey Goetz
Construction Industry	Jeremy Crandall	(303) 458-1736	Jeff Borger
Denver Building Dept.	Jerry Maly	(303) 914-4300	Scott Hargrove
Education	Irena Kahanek Michelle Black	720.296.7595 303.860.9021	Sara Mickus
Ethics	Keith Porter	(626) 233-9758	Lacey Goetz
Existing Structures	Evan Hammel	(303) 860-9021	Brian Lobmeyer
Membership	Matthew Hood Jeannette Torrents	(303) 318-6539	Jeff Borger
Nominating	Jerry Maly	(303) 914-4300	Scott Hargrove
Northern Colorado	Greg Black	(970) 685-4152	Scott Hargrove
Southern Colorado	TBD	TBD	Holly Janowicz
Western Slope	Sara Mickus	(970) 618-7708	Sara Mickus
Precast Concrete	Trevor Kirkley	(303) 298-1900	Kim Olson
SEER	Mike Piper	(303) 431-6100	Lacey Goetz
SE3	Alex Lakocy	(720) 544-5453	Lacey Goetz
Scholarship	Jeannette Torrents	(303) 444-1951	Kim Olson
Seismic Standards	Rob Jackson	(303) 843-2850	Holly Janowicz
Snow Loads	Jeannette Torrents	(303) 444-1951	Brian Lobmeyer
Standard of Practice	Jim Ness	(303) 623-4927	Lacey Goetz
Steel Materials	Sylvia Iverson	(303) 757-6323	Kim Olson
Wind Loads	Dale Jones	(970) 568-2919	Jeff Borger
Wood	Jeremy Crandall	(303) 458-1736	Jeff Borger
Young Members	Katie Courtright	303.399.5154	Holly Janowicz

COMMITTEE NEWS

Structural Engineers Association of Colorado

Dear SEAC and SEAC YMG Members:

Are you planning on taking the PE or SE exam this coming April?

Want to increase your chances of passing?

Are you looking for a study group or a group to take a review course with?

Are you a PE interested in a SE course or assisting with the study group?

The SEAC Education Committee along with the SEAC Young Members Group would like to invite you to get together via a virtual meeting on **Wednesday, January 26th from 5-6 PM.**

This kick-off meeting is to assess the interest in logistics of possible study groups and participation in webinar course selection (group discount available) for both the PE and SE exams in April, and discuss helpful tricks and tips to increase your chances of passing the exam!

This opportunity is being extended to SEAC members and non-members so feel free to distribute this to your colleagues and encourage them to join. If you have any questions, please contact the SEAC Education Committee at : EducationSEAC@gmail.com

Please RSVP in this spreadsheet/ link below- by end of day on Friday, January 21st:

https://docs.google.com/spreadsheets/d/1q7TIL0GuE1Kq44AmcsRNQm0gR-MGoQMbw6O5Huvi_44/edit?usp=sharing

We will send a webinar meeting link and the PE/SE webinar course description to registered participants before the kick-off meeting.

Refer to additional exam information at the NCEES website: <http://ncees.org/engineering/se/>

The SEAC Education Committee and SEAC YMG

The SEAC Education Committee is looking for new excited and motivated members. This is a great time to join and learn more about the various educational events which we organize - including the SEAC Fall Seminar, Project Presentations, Job Site Tours and PE/SE Review Webinars and the Bridge Review session. Come to join us!



COMMITTEE NEWS

Structural Engineers Association of Colorado

2021 SEAC Fall Seminar Summary

On October 7th, the SEAC Education Committee hosted the Fall Seminar at the DoubleTree by Hilton hotel in Westminster. This was SEAC's third in-person event in 2021, and the seminar was also webcasted. Thank you to our presenters, Greg Kingsley, PhD, P.E., P.Eng. who provided an "Overview of Mass Timber Construction in 2021" & Ron Klemencic, PE, SE, Hon. AIA, NAC, NAE and Tom Meyer, PE, SE – who provided focused seminar on "Getting the Loads from Here to There- Load Paths, Diaphragm and other Essentials". We hope everyone enjoyed the seminar and networking with the Fall Seminar sponsors.

There was a great turnout with 74 people attending the seminar in person and 53 attendees watching the webinar remotely.

Thank you to all Fall Seminar sponsors for their continued support: Lam-Wood Systems, Simpson Strong-Tie, KELLER, Steel Tube Institute, Rosboro and Park Range Construction.

If you didn't have the chance to complete the FS Survey, feel free to share with us your feedback on the event or future FS Topic suggestions at EducationSEAC@gmail.com"



COMMITTEE NEWS

Structural Engineers Association of Colorado



For SEAC member review and feedback. Comments can be directed to the Seismic Committee Chair, Rob Jackson rob.jackson@amentum.com. We would also like to announce the paper at the January breakfast meeting. Comments will be incorporated or addressed and a formal vote from the Membership will then be planned at the March breakfast meeting.

A Position Statement on the Seismic Safety of New Colorado Buildings
by the Seismic Committee of the
Structural Engineers Association of Colorado

Date:
December 3, 2021

Position Statement:

Design and construction of new Colorado buildings should use the Seismic Design Categories required by the International Building Code (IBC) tables as modified below. The modified cells are highlighted. The tables are based on the 2018 IBC. Corresponding tables in previous versions of the IBC have used "Occupancy Category" or "Seismic Use Group" rather than the current "Risk Category."

TABLE 1613.2.5(1)
SEISMIC DESIGN CATEGORY BASED ON SHORT PERIOD (0.2 second) RESPONSE ACCELERATION

	RISK CATEGORY			
	I	II	III	IV
$S_{DS} < 0.167g$	A	B	B	B
$0.167g \leq S_{DS} < 0.33g$	B	B	B	C
$0.33g \leq S_{DS} < 0.50g$	C	C	C	D
$0.50g \leq S_{DS}$	D	D	D	D

TABLE 1613.2.5(2)
SEISMIC DESIGN CATEGORY BASED ON 1-SECOND PERIOD RESPONSE ACCELERATION

	RISK CATEGORY			
	I	II	III	IV
$S_{DI} < 0.067g$	A	B	B	B
$0.067g \leq S_{DI} < 0.133g$	B	B	B	C
$0.133g \leq S_{DI} < 0.20g$	C	C	C	D
$0.20g \leq S_{DI}$	D	D	D	D

Background:

Colorado has a long history of seismic activity including the 1882 earthquake that shook the ground over a large portion of the state. The use of Seismic Design Category A (SDC A), which does not require design for earthquakes is inappropriate for buildings of significant occupancy.

The International Building Code (IBC) is intended to allow SDC A for the design of buildings only in areas deemed to be of lowest seismic hazard. It provides a false economy: small savings in first cost and potentially large future loss when a damaging earthquake occurs. For SDC A, a lateral force of only 1% of the total gravity force is required at each level. Earthquake shaking as indicated by the seismic hazard maps in the IBC seismic provisions could be 10 times larger. The earthquake hazard in Colorado has a high uncertainty because of the relatively short time of recorded earthquake history in

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COMMITTEE NEWS

Structural Engineers Association of Colorado



SEAC/Seismic
December 2021
Page 2

the state. On-going changes in the national hazard maps combined with the IBC criteria for Seismic Design Category can result in a “yoyo” effect in seismic design requirements. These changes in the maps are usually related to judgments about the most appropriate models to use for propagation of ground motions, and the data to choose a model for Colorado is very sparse. Currently most of the Front Range cities are on the borderline between SDC A and B for Site Class C. The 2024 IBC will broaden the Front Range area for SDC A such that, even for the default Site Class D, the design for SDC A will be possible by code in many more locations.

Colorado’s largest historical earthquake occurred on November 7, 1882, when the population was very sparse. No instruments existed then as are in use today to estimate earthquake magnitudes. Based on felt reports, the magnitude has been estimated at 6.6 ± 0.6 . The location of this event appears to have been in the northern Front Range west of Fort Collins. The shaking was so great in Denver that equipment bolts at the electric light plant were sheared off and bent causing power and lighting to go out in the city. The earthquake was apparently felt as far east as Salina, Kansas and as far west as Salt Lake City. Although included in the USGS maps as a contributing earthquake, the methodology used to include the 1882 earthquake has resulted in no significant effect on the hazard maps for Colorado as a result of its inclusion. Colorado is one of only 14 states with documented historical earthquakes of magnitude 6.0 or greater. There are over 90 potentially active faults in Colorado. Only six have been individually included in the USGS maps that guide the building code seismic provisions.

Creating an inventory of buildings in which seismic design is included in some editions of the code and ignored in others is a poor public policy. There is a precedent for SEAC making a policy statement similar to this one to avoid building code “yoyo” effects. The 1997 Uniform Building Code would have increased the design ground motions in the Front Range area substantially over what was in the 1994 and prior editions of the UBC. At the time the 1997 UBC was being considered for local adoption, it was already known that the upcoming 2000 IBC would use the ground motions in the 1998 edition of ASCE 7, which were about the same as in the 1994 UBC. Structural engineers then recommended that local building code amendments refer to ASCE 7-98 for the ground motions, and a “yoyo” was avoided.

This Position Statement has negligible impact on construction cost yet provides a substantial enhancement to life-safety.

COMMITTEE NEWS

Structural Engineers Association of Colorado

2021 Gingerbread Bridge Competition Results

Congratulations to all of the teams that participated in the 2021 Gingerbread Bridge Competition. We hope everyone had a great time designing, constructing, and decorating their bridges and enjoyed some friendly competition.

This year, the SEAC YMG Committee reconfigured this amazing event to suit a hybrid format. All display judging took place virtually. Teams submitted photos to be reviewed by our architectural judges. People's Choice voting took place online and was open to the entire country. 192 people voted for their favorite bridge displays, representing 14 states and 22 Colorado towns. For the structural portion of the competition, teams arrived at Anchor Engineering on November 19th at designated times to allow the load testing to take place in a socially-distanced matter. A Virtual Awards Banquet was held on Wednesday, December 8th, which included networking breakout rooms, a display and load testing highlight reel, DeWalt power tool raffle and award announcements

While we missed the buzz of the traditional in-person event, the YMG Committee is proud of how we were able to adapt to hold this event responsibly in the flurry of the holiday season. We were also able to increase visibility for this event by marketing the virtual People's Choice Voting nationally through NCSEA. We look forward to returning to the in-person format in the future.

Recap of the 2021 Gingerbread Bridge Competition:

- 9 teams participated
 - 1 high school team
 - 3 college teams
 - 5 professional teams

Architectural Design Results

- 1st Place: *Cruella D'Bridge*
Anchor Engineering
- 2nd Place: *Building Charlie Brown*
Burns & McDonnell
- 3rd Place: *Zen Collective*
Wallace Engineering

Continued...

COMMITTEE NEWS

Structural Engineers Association of Colorado

People's Choice (192 total votes, 14 states, 22 Colorado towns)

1st Place: *Building Charlie Brown*
Burns & McDonnell

2nd Place: *Cruella D'Bridge*
Anchor Engineering

3rd Place: *RMG's Rainbow Bridge*
RMG Engineers

Structural Performance

1st Place: *Cruella D'Bridge*
Anchor Engineering
Total Load = 300.2 lbs
Strength-to-Weight Ratio = 19.4

2nd Place: *Zen Collective*
Wallace Engineering
Total Load = 312.2 lbs
Strength-to-Weight Ratio = 15.1

3rd Place: *Building Charlie Brown*
Burns & McDonnell
Total Load = 158.6 lbs
Strength-to-Weight Ratio = 12.9

The event results and links to the Gingerbread Bridge Competition Facebook page can also be found at gingerbreadbridge.com.

Event Photos: [Facebook – GBBC 2021 Photos](#)

Awards Banquet Slides: [2021 Gingerbread Bridge Competition Awards Banquet](#)

Based on the generous contributions our corporate sponsors and donations made to this year's raffle, the SEAC YMG was able to raise approximately \$5865. Based on the competition results, a contribution of \$2,410 will be made to the Cystic Fibrosis Foundation on behalf of Anchor Engineering, our 1st Place team in the Structural and Architectural Design categories.

Additional donations will be put towards a scholarship to send one member of the SEAC YMG to the 2022/2023 NCSEA Summit. Applications for the SEAC YMG Scholarship will be available later in the year.

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COMMITTEE NEWS

Structural Engineers Association of Colorado

Sponsor Appreciation:

This amazing event would not be possible without the support from our sponsors.



A special thanks go out to Anchor Engineering for allowing the SEAC YMG to take over a conference room for the load testing event.

Thank you to Lam-Wood and WJE for the use of their equipment for the test rig.

The generous donations from our Gold and Platinum sponsors allowed us to provide stipends to all of this year's student teams. Our Platinum sponsors allow us to provide a scholarship for one Young Member to attend next year's NCSEA Summit. Thank you so much for your support!

Looking Ahead:

The SEAC YMG Committee is already looking ahead to the preparations for the 2022 Gingerbread Bridge Competition. Please be sure to share your feedback with us so we can help improve the event for next year. We are particularly interested in comments on the venue, schedule, event logistics, and rules. Email your feedback, suggestions and/or rule change suggestions to ymg@seacolorado.org. Want to help plan the Gingerbread Bridge Competition? Get involved in the SEAC YMG Committee to help shape future Gingerbread Bridge Competitions!

While we did not have as much turn-out from local middle schools and high schools this year, we hope to get the Gingerbread Bridge Competition mentorship program running in full force again next year. Through this event, we have the opportunity to spark a passion for structural engineering in middle school and high school students. Volunteers meet with students to share tips and tricks for the design, construction and transportation of gingerbread bridges, as well as lessons learned from their experiences with the Gingerbread Bridge Competition with students prior to the competition. We encourage you to volunteer your time next year in the greater Denver area.

Continued...

COMMITTEE NEWS

Structural Engineers Association of Colorado

This event is also made more accessible to students through corporate sponsorship. Based on the generous contributions of our 2019 sponsors, we were able to waive the entry fee and provide a stipend of up to \$100 for construction materials to all of our participating student teams! This event is an avenue to get middle school and high school students thinking about structural engineering as a potential career path. At the college level, this event is a great way to connect potential employers with proactive students who can get excited about unique design challenges. Your firm's support continues to help grow the Gingerbread Bridge Competition outreach program.

HELP WANTED! SEAC NEEDS A NEW NCSEA DELEGATE!

Our very own Jeannette Torrents was just elected to serve on the NCSEA Board of Directors. As such, she has resigned her position as SEAC's delegate to NCSEA, which she has served thoroughly and dutifully for the last several years. We can't express enough gratitude to Jeannette for her efforts in this position.

We have begun discussing who may fill this role and wanted the membership's input. If you are interested in filling this role, or would like to suggest someone else, please contact me by February 15, 2022 at kim.olson@nucor.com.

The requirements for delegates as published by the SEAC bylaws are as follows. The NCSEA delegate must be:

a past board member and/or active committee chair with a thorough knowledge of SEAC willing to serve a term of no less than 2 years and no more than 5.

The main goal of this position is to keep the lines of communication open between NCSEA and SEAC. Reporting between the two organizations and some participation in each organization is essential. For more detailed information about your role as a delegate, please refer to the NCSEA Delegate Handbook found here: <http://www.ncsea.com/downloads/files/MemberOnly%20Resources/2021/Delegate%20Handbook%202021.pdf>

Thank you for your consideration! I look forward to hearing from you.

Happy New Year!

Kim Olson, Director

AWARDS

Structural Engineers Association of Colorado

Susan Ann “Susie” Jorgensen presidential Leadership Award

This new award was created to honor the late NCSEA Board President and advocate for the profession, Susan Ann "Susie" Jorgensen, who passed away in November 2020. This award is presented to an individual who has demonstrated exceptional leadership potential through their activities within NCSEA and/or their SEA (even if they did not serve in a formal leadership role). The award is to be bestowed on candidates who embody Susie's passion, vision, and legacy of leadership and is intended to celebrate the increased participation of emerging leaders and encourage recipients to engage (or continue to engage) in formal leadership.

Katharine (Katie) A. Courtright, P.E., is a project engineer for JVA, Inc. in Denver, CO. She joined the Colorado SEA in 2012 as a student member when she was selected to receive a SEAC scholarship. During college, Ms. Courtright served as the SEAC Young Member Group collegiate liaison for the Colorado School of Mines. Upon graduation in 2014, she joined the Young Member Committee, becoming co-chair in 2016 and chair in 2017. Her service on the YMG Committee has included coordination of the annual SE/PE Study Group Kick-Offs and AASHTO Review Sessions, as well as technical presentations, mentoring, and outreach events. Ms. Courtright has been instrumental in encouraging student involvement in SEAC's annual Gingerbread Bridge Competition. She is currently serving on the newly formed SEAC SE3 Committee.



2022 SEAC Scholarships

Two \$4,000 scholarships may be awarded this spring.

The winning students must be upperclassmen attending an accredited engineering school. They must intend to practice structural engineering in Colorado. Selection criteria include the student's academic achievement, involvement in the community, professional involvement, and volunteer work. There will be an application phase followed by a selective interview process.

Applications can be completed online at
https://seacolorado.org/scholarship_opportunities.php

Only US citizens are eligible.

Applications are due by February 4, 2022.

2022 CALENDAR OF EVENTS

Structural Engineers Association of Colorado

SEAC Calendar

2022

Important Dates

BOD Meetings - 7:30am via Zoom

Thursday January 6, 2022
Thursday February 3, 2022
Thursday March 3, 2022
Thursday April 7, 2022
Thursday May 5, 2022
Thursday June 2, 2022
Thursday July 7, 2022
Thursday August 4, 2022
Thursday September 1, 2022
Thursday October 6, 2022
Thursday November 3, 2022
December Board Orientation TBD

Business Management - 7:30am at Martin | Martin

Thursday February 10, 2022
Thursday April 14, 2022
Thursday June 9, 2022
Thursday August 11, 2022
Thursday October 13, 2022

General/Annual Meetings - 7:30am

Thursday January 20, 2022 Doubletree Westminster
Thursday March 10, 2022 at TBD
Thursday May 19, 2022 at TBD
Thursday July 21, 2022 at TBD
Thursday September 22, 2022 at TBD

Fall Conference TBD

Annual Meeting November TBD

SEAC Newsletter Deadlines

January issue - December 27th
March issue - February 21st
May issue - April 25th
July issue - June 27th
September issue - August 29th
November issue - October 24th

SEAC ENews Deadlines

February issue - January 24th
April issue - March 28th
June issue - May 23rd
August issue - July 25th
October issue - September 26th
December issue - November 28th

January

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August

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September

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October

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9	10	11	12	13	14	15
16	17	18	19	20	21	22

November

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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December

S	M	T	W	T	F	S
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2	3	4	5	6	7	8
9	10	11	12	13	14	15
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23	24	25	26	27	28	29
30						

OTHER EVENTS OF INTEREST

Structural Engineers Association of Colorado

The National Institute of Building Sciences Building Seismic Safety Council (BSSC) is hosting a webinar series in 2022, centered around the eight chapters of the 2020 *NEHRP Recommended Seismic Provisions: Design Examples, Training Materials, and Design Flow Charts* (FEMA P-2092, in the process of final publication).

These chapters are being developed by BSSC for the Federal Emergency Management Agency (FEMA) to illustrate and explain the applications of the 2020 *NEHRP Recommended Seismic Provisions for New Buildings and Other Structures* ([FEMA P-2082](#)), *ASCE/SEI 7-22 Minimum Design Loads and Associated Criteria for Buildings and Other Structures*, and the material design standards.

The webinar series serves as part the FEMA NEHRP/BSSC outreach and education effort.

The webinar series includes:

Introduction to the 2020 NEHRP Recommended Seismic Provisions: Design Examples, by Bret Lizundia and Mai (Mike) Tong, January 20, 2022

Fundamentals of Earthquake Engineering, by James Harris, February 10, 2022

Diaphragm Seismic Design Part 1, by Kelly Cobeen, March 3, 2022

Diaphragm Seismic Design Part 2, by Kelly Cobeen, March 10, 2022

Reinforced Concrete Ductile Coupled Shear Walls, by SK Ghosh, March 31, 2022

Nonstructural Components: Fundamentals and Design Examples – Part 1, by Bret Lizundia, April 21, 2022

Nonstructural Components: Fundamentals and Design Examples – Part 2, by Bret Lizundia, April 28, 2022

Fundamentals and Evolution of U.S. Seismic Design Values, by Ron Hamburger, and ***The 2018 Update of the USGS National Seismic Hazard Model***, by Sanaz Rezaeian, May 19, 2022

New Multi-Period Response Spectra and Ground Motion Requirements, by Charles Kircher, ***Additional Revisions to Ground-Motion Provisions***, by CB Crouse, and ***Dissection of Example Changes to the MCEr Ground Motion Values***, by Nicolas Luco, June 2, 2022

Cross-Laminated Timber (CLT) Shear Walls, by Philip Line and M. Omar Amini, and ***Resilience-Based Design***, by David Bonowitz, June 23, 2022

Seismic Design of Coupled Composite Plate Shear Walls/Concrete Filled (C-PSW/CF), by Soheil Shafaei and Amit Varma, August 4, 2022

Registration is free and open for all webinars. Space is limited. To register, visit <https://www.nibs.org/events/nehrrp-webinar-series>.

Certificates of attendance with Professional Development Hours (PDHs) and Continued Education Units (CEUs) for AIA and ICC will be provided to those who attend the live webinar.

Regards,

Jiqiu (JQ) Yuan, PE, PhD, PMP

Executive Director, Multi-Hazard Mitigation and Building Seismic Safety Council

National Institute of Building Sciences

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