



STRUCTURAL ENGINEERS OF COLORADO NEWSLETTER

2020 SPRING SCHEDULE SIGN UP FOR THESE EVENTS

AT

[HTTPS://](https://seacolorado.org/)

[SEACOLORADO.ORG/](https://seacolorado.org/)

SEAC Breakfast Meeting

January 16, 2020

Lakewood Country Club

6800 W 10th Ave.

Lakewood, CO 80214

7:30am-9:00am

Out-of-area may participate via WebEx

SEAC NoCo Meeting

January 16, 2020

CTL Thompson

400 North Link Lane

Fort Collins, CO 80524

7:30am-9:00am

YMG HSS Connections

January 22, 2020

Martin/Martin

12499 W Colfax Ave.

Lakewood, CO 80215

6:00pm

SEAC/CAGE YMG Ski Trip

February 21, 2020

Transportation to Winter

Park from TRex RTD Lot

Morrison, CO

7:00am-6:00pm

Business Management Committee Meeting

February 13, 2020

Martin/Martin

12499 W Colfax Ave.

Lakewood, CO 80215

7:30am-9:00am

January General Meeting

January 16, 2020

Lakewood Country Club

6800 W 10th Ave

Lakewood, CO 80214

7:30am-9:30am

Help Me Help You—A Panel Discussion

Join us for a lively discussion on how Geotechnical Engineers and Structural Engineers can provide value to each other on projects.

Panelists include:

Kathleen Noonan, AG Wassenaar

Ralph Rempel, Martin|Martin

Tom Soell, JVA

Pete Stauffer, Wiss, Janney, Elstner Assoc.



Volunteer in 2020

If you would like to become more involved in SEAC, you can join a committee (listed on page 5) by simply contacting the Committee Chair or the SEAC Office at administrator@seacolorado.org. There are many ways to have an impact on your profession, from planning presentations, to outreach, to supporting networking events. Get involved!

PRESIDENT'S MESSAGE

Structural Engineers Association of Colorado

The first thing I would like to say as the new president of the Structural Engineers Association of Colorado (SEAC) is wow, is this real? When I joined SEAC, I would never have believed I would be the president one day. Looking back there are many truly amazingly talented people that have held this position in the past. One was a mentor to me in my early professional life, encouraging me to join SEAC, and others have guided my time on the board. Not to sound cliché, but there are some big shoes to fill.

My goal over the next year is to provide our members with the tools they need to advance our profession. Advance through education, enrichment, and public outreach. Enrichment focusing on recruitment and retention, to make sure our profession has the talented engineers that it needs to lead us into the future.

Over the last several years I have witnessed firsthand the successes of our committees. We are ever advancing with the education and enrichment programs provided by our committees. We are in a pretty good place, and with the help of our amazing volunteers and input from our membership, this will continue.

The momentum our active committees have achieved allows this year's board to advance our profession outside our community. Increasing the structural engineering community's visibility through public outreach. Looking towards the future.

Over the next year, SEAC will continue to provide the programming you have seen over the past several years, but we also will work towards advancing our profession.



Charles S. Mitchell

Welcome to our Newest Members

Kristyn Hartmann
(Professional Member)
SGM Inc.

Shane Miller
(Upgrade to Professional Member)
Froelich Engineers, Inc.

Jeffrey Kvamme
(Affiliate Member)
AECOM

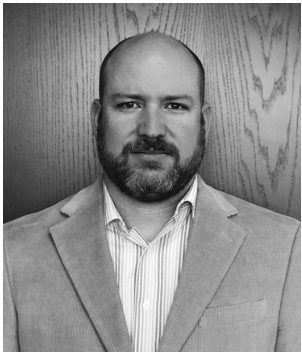
Marshall Murphy
(Affiliate Member)
Albright and Assoc.

Amy McDaniel
(Professional Member)
PK Associates LLC

Mindy Nastal
(Professional Member)
SGM Inc.

BOARD OF DIRECTORS

Structural Engineers Association of Colorado



Chad Mitchell

President

S.A. Miro, Inc.

720-407-1031

president@seacolorado.org



Lacey Goetz

VP/Treasurer

Integral Engineering

303-804-7003

vp@seacolorado.org



Brian Lobmeyer

Secretary

Anchor Engineering Inc.

303-783-4797

secretary@seacolorado.org



Jeremy Crandall

Past President

Lam-Wood Systems, Inc.

303-458-1736

pastpresident@seacolorado.org



Mike Piper

Director

Martin/Martin

303-431-6100

director3@seacolorado.org



Jeff Borger

Director

Jirsa Hedrick

303-839-1963

director1@seacolorado.org



Maryann Davis

Director

Drake-Williams Steel

720-354-4664

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 on line 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 | Desiree Mackey | (303) 431-6100 | Jeremy Crandall |
| Building Dept. Liaison | Jerry Maly | (303) 914-4300 | Chad Mitchell |
| Business Management | Paul Doak Tom Soell | (303) 399-5154 (303) 444-1951 | Lacey Goetz |
| Construction Industry | TBD | TBD | Jeremy Crandall |
| Denver Building Dept. | Jerry Maly | (303) 914-4300 | Chad Mitchell |
| Education | Irena Kahanek Holly Janowicz | 720.296.7595 303.860.9021 | Chad Mitchell |
| Ethics | Peter Marxhausen | (303) 947-5375 | TBD |
| Existing Structures | Gene Stevens | (303) 860-9021 | TBD |
| Membership | Matthew Hood | (303) 318-6539 | Maryann Davis |
| Nominating | Jerry Maly | (303) 914-4300 | Jeremy Crandall |
| Northern Colorado | Greg Black | (970) 619-8986 | TBD |
| Southern Colorado | TBD | TBD | Chad Mitchell |
| Western Slope | Bob Patillo | | Mike Piper |
| Precast Concrete | Trevor Kirkley | (303) 298-1900 | Jeremy Crandall |
| SEER | Brent Norris Mike Piper | 303.860.9021 303.431.6100 | Mike Piper |
| Scholarship | Jeannette Torrents | (303) 444-1951 | Maryann Davis |
| Seismic Standards | Rob Jackson | (303) 843-2850 | Lacey Goetz |
| Snow Loads | Jeannette Torrents | (303) 444-1951 | TBD |
| Standard of Practice | Jim Ness | (303) 623-4927 | Chad Mitchell |
| Steel Materials | Sylvia Iverson Eric Sobel | (303) 757-6323 | Maryann Davis |
| Wind Loads | Dale Jones | (970) 568-2919 | TBD |
| Young Members | Katie Courtright Charlie Petzinger | 303.399.5154 303.783.4797 | Jeremy Crandall |

GINGERBREAD BRIDGE COMPETITION

Structural Engineers Association of Colorado

No, we're not changing our name to the American Institute of Gingerbread Construction or the National Gingerbread Bridge Alliance, but you'll want to get a load of the amazing baked bridges from the 2019 Competition. Denver's Gingerbread Bridge Competition, started by Ascent Group in 2006 and coordinated by the Structural Engineers Association Colorado Young Member Group (SEAC YMG), drew 16 teams of architects, engineers, contractors, and students in December. Teams ranging from middle-schoolers to practicing professionals created their bridges ahead of time and brought them to Dry Dock Brewing Co. to be judged in the categories of Architectural Design, Structural Design, and People's Choice. The Structural Design rankings are based on the ratio of the total load capacity to bridge weight. Proceeds from the event go to charities designated by first-place teams. [Check out the winning bridges by clicking here!](#)



1st Place Architectural Design: Yellow Brick Bridge – Campus Middle School 6th Grade STEMblazers



1st Place People's Choice: Route 66 – RMG

YOUNG MEMBERS GROUP

Structural Engineers Association of Colorado

Top Things You Should Know About HSS Connections

HSS connections often seem mysterious — but they don't have to. While not a how-to guide, this presentation highlights aspects of HSS connection design that are often overlooked or misunderstood. Attendees will gain a clear understanding of tension, shear, moment and truss connections and how they differ from other types of connections.

Join the SEAC YMG on Wednesday, January 22nd at the Martin/Martin office in Lakewood at 6PM for a presentation on HSS connection design provided by Altas Tube. Atlas Tube is the largest producer of steel HSS sections in North America.

[Click here to register.](#)

SEAC Young Member Group will be hosting a ski trip with Colorado Association of Geotechnical Engineers' Young Member Group on Friday, February 21, 2020. This event is open to anyone from SEAC or CAGE that is interested. The trip will include round trip transportation from Golden (T-Rex Parking Lot, Morrison Exit off I-70), lunch, and your lift ticket. Reduced prices are available for those that may already have a ski pass. Come join us for a fun day of skiing and networking on the slopes! We are seeking Sponsorships! Stay tuned for more information.



COLORADO ASSOCIATION OF
GEOTECHNICAL ENGINEERS



2019 CALENDAR OF EVENTS

Structural Engineers Association of Colorado

SEAC Calendar

2020

Important Dates

| |
|---|
| BOD Meetings - 7:30am at S.A. Miro |
| Thursday January 9, 2020 |
| Thursday February 6, 2020* |
| Volunteer Training with Leo Baran, NCSEA - Feb. 28, 2020 |
| Thursday March 5, 2020 |
| Thursday April 2, 2020* |
| Thursday May 7, 2020 |
| Thursday June 4, 2020* |
| Thursday July 2, 2020 |
| Thursday August 6, 2020* |
| Thursday September 3, 2020 |
| Thursday October 1, 2020* |
| Thursday November 5, 2020 |
| Thursday December 3, 2020* |
| * notes conference call only |
| Business Management - 7:30am at Martin Martin |
| Thursday February 13, 2020 |
| Thursday April 9, 2020 |
| Thursday June 11, 2020 |
| Thursday August 13, 2020 |
| Thursday October 8, 2020 |

General/Annual Meetings - 7:30am

| |
|--|
| Thursday January 16, 2020 at Lakewood Country Club |
| Thursday March 19, 2020 at Lakewood Country Club |
| Thursday May 21, 2020 at Lakewood Country Club |
| Thursday July 16, 2020 at Lakewood Country Club |
| Thursday September 17, 2020 at Lakewood Country Club |
| Fall Conference TBD |
| Annual Meeting November 5 at Space Gallery |
| SEAC Newsletter Deadlines |
| January issue - January 3rd |
| March issue - February 21st |
| May issue - April 24th |
| July issue - June 26th |
| September issue - August 21st |
| November issue - October 23rd |
| SEAC ENews Deadlines |
| February issue - January 31st |
| April issue - March 27th |
| June issue - May 29th |
| August issue - July 31st |
| October issue - September 25th |
| December issue - November 27th |

January

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | 1 | 2 | 3 |
| | | | | 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 | 31 | | | |

February

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | | 1 |
| | | | | | | 2 |
| 3 | 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 | | |

March

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 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 | 31 | | | | |

April

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 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 | 31 | | | | | |

May

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | 1 | 2 |
| | | | | 3 | 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 | 31 | | |

June

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | | 6 |
| | | | | 1 | 2 | 3 |
| 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 | |

July

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | 1 | 2 | 3 |
| | | | | 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 | 31 | | | |

August

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | | 1 |
| | | | | 2 | 3 | 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 | 31 | |

September

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | 1 | 2 | 3 |
| | | | | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |

October

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | | 3 |
| | | | | 1 | 2 | 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 |

November

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | | 7 |
| | | | | 1 | 2 | 3 |
| 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 | | | |

December

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | | 5 |
| | | | | 1 | 2 | 3 |
| | | | | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |

Upcoming Webinars:

January 9th [Serviceability Design for the Practicing Engineer](#)

Emily Guglielmo, S.E.

January 14th [The Use of Geotechnical Reports by the Structural Engineer](#)

Mark Gilligan, S.E.

January 30th [Efficient Design of Long-Span Composite Steel Deck-Slabs](#)

Vitaliy Degtyarev, PhD, P.E., S.E.

February 4th [SpeedCore: Rainier Square - A Project Case Study](#)

Brian Morgen

February 20th [Basics of Strut and Tie Modeling](#)

Royce Floyd, Ph.D., S.E.

OTHER EVENTS OF INTEREST

Structural Engineers Association of Colorado

ASCE COLORADO INVITES YOU!

COLORADO INFRASTRUCTURE REPORT CARD RELEASE

January 30, 2020 • 10:00AM
Colorado State Capitol West Foyer
200 E Colfax Ave. Denver, CO 80203

RSVP/QUESTIONS TO PEYTON GIBSON 910-551-7054
OR PEYTON.J.GIBSON@GMAIL.COM



OTHER EVENTS OF INTEREST

Structural Engineers Association of Colorado

 University of Colorado **Boulder**

Post-Disaster Safety Evaluation of Buildings & Infrastructure

ATC-20, ATC-45, and Cal OES SAP Training

**Sunday
5 Apr 2020**

8 AM - 5 PM



Training session

Colorado experiences earthquakes, floods, tornadoes, and other natural disasters that damage infrastructure and threaten people's safety. The 2013 Colorado floods damaged or destroyed 20,000 homes and 50 highway bridges. Colorado has experienced 7 damaging earthquakes since 1944 with magnitudes of 5.2 to 5.5, and in 1882 experienced a magnitude-6.6 earthquake near Estes Park. Damage from such events can overburden building safety officials and lifeline operators. Colorado is training a corps of volunteers to rapidly assess the safety of buildings and critical infrastructure, speed recovery, and help people quickly and safely return to their homes, offices, and public spaces. The training uses the de facto international standards for post-disaster safety evaluation procedures called Post-Earthquake, Windstorm and Flood Safety Evaluation of Buildings (ATC-20 and ATC-45).

The University of Colorado Boulder is providing training on ATC-20 and ATC-45 to prepare you to assess building and lifeline safety following a disaster. Taught by a University of Colorado structural engineer and certified California Office of Emergency Services Safety Assessment Program (Cal OES SAP) trainer with experience in U.S. and international disasters, you will learn basic engineering principles and standard procedures for post-disaster safety evaluation. You will participate in exercises using real-life examples of earthquake, hurricane, and flood damage from U.S. and abroad.

Training topics

- ATC-20/45 building safety evaluation procedures.
- Cal OES SAP certification for qualified professionals. Attendance is open to all but certification is limited to licensed engineers, architects, engineering geologists, building inspectors, and public-works inspectors; list at <https://goo.gl/H2HahX>.
- Training examples of damaged buildings from disasters in the U.S. and abroad.
- How do buildings and other infrastructure structurally react to extreme loads?
- Procedures and exercises for wood, masonry, concrete, and steel buildings.
- GREEN, YELLOW, and RED placards, what are they and how do we use them?
- When and how do you perform a safety assessment and post a building?

Training logistics

WHERE: Engineering Center ECCE room 1B41, Boulder CO; see map on reverse
COST & CLASS SIZE: \$20 covers coffee, bagels, and donation to ASCE and EERI student chapters. Manuals provided free by FEMA. Limited to 50 people. Course provides documentation for continuing education units (0.8 CEUs).

TO REGISTER: visit <https://sap-cu-apr2020.eventbrite.com>

OTHER EVENTS OF INTEREST

Structural Engineers Association of Colorado



Instructor

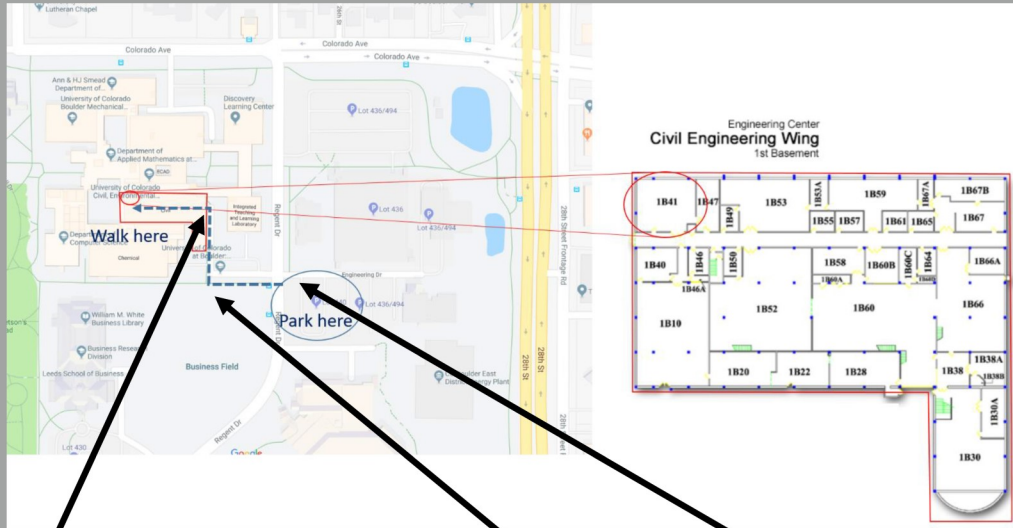
Keith Porter, P.E., PhD., M.ASCE



Dr. Porter is a licensed California professional engineer, a research professor at the University of Colorado Boulder, and principal of the consulting company SPA Risk LLC. He has 30 years of experience in structural engineering practice and university research addressing natural disasters. He leads the new *Natural Hazard Mitigation Saves* study for the National Institute of Building Sciences, updating the groundbreaking, Congressionally-mandated 2005 benefit-cost analysis of natural hazard mitigation for 3 federal agencies and 4 private-sector sponsors. He helped to lead the US Geological Survey's ShakeOut, ARkStorm, Tsunami, and HayWired disaster planning scenarios. He has performed post-disaster reconnaissance and data collection after several natural disasters in the U.S. and abroad. He is a certified Cal OES SAP trainer and holds engineering degrees from UC Davis, UC Berkeley, and Stanford University.

Directions to classroom ECCE 1B41

Park in paid lot 440, <https://goo.gl/maps/8p99Nmsjq1S2>. Follow the dashed lines on the map below to ECCE 1B41. If walking from elsewhere on campus, point Google Maps here: <https://goo.gl/maps/C7ewhWcRrS72>.



NEWSLETTER ADS

Structural Engineers Association of Colorado



YOUR ADVERTISEMENT HERE

Consider placing an ad in the bi-monthly SEAC newsletter to reach over 300 members, including professional engineers, suppliers, and vendors.

Contact Kim Wyatt at administrator@seacolorado.org or go online to <https://seacolorado.org/seac-shop/>.

Full Page Employment Ad: \$250
Half Page Employment Ad: \$150
Quarter Page Employment Ad: \$100

Full Page Ad: \$350
Half Page Ad: \$250
Quarter Page Ad: \$200