

2018 STRUCTURAL ENGINEERING SUMMIT OCTOBER 24–27 · SHERATON GRAND · CHICAGO, IL

Designed by Structural Engineers for Practicing Structural Engineers



WELCOME TO THE 2018 SUMMIT!



The NCSEA Board of Directors and the Summit Committee welcome you to Chicago for the 2018 Structural Engineering Summit. This year's Summit is NCSEA's highest attended ever, and it will showcase our extensive education sessions and networking events as well as the largest trade show ever. Thanks to you, this is an amazing opportunity to bring together an incredible network of structural engineers and celebrate our profession.

During these four days, I hope you take advantage of every opportunity to learn, network and have some fun with your fellow SEs. Also, please feel free to stop me or any member of the NCSEA Board of Directors or staff to ask a question or let us know of additional opportunities to support you and the profession.

It has been my honor to serve as your NCSEA President this past year. Enjoy the Summit.

Williston L. Warren, IV-S.E., P.E.-Struct, F. SEAOC, NCSEA Board President

SUMMIT MATERIALS

2018 NCSEA SUMMIT APP

Available in the Google Play Store and Apple App Store, this free app includes everything you need while attending the Summit. It features the complete schedule, an interactive map to help you find your next session or event, WIFI information, and even local attractions. You can also interact with other attendees and take notes during sessions and on the Trade Show Floor.



WHAT IS ON YOUR HILTI-SPONSORED FLASH DRIVE?



FOR ATTENDEES

- 2019 Call for Summit Abstracts
- 2019 Call for Excellence in Structural Engineering Awards Entries
- Continuing Education Self-Report Form
- NCSEA Annual Report
- Speaker Slides & Handouts
- Summit Attendee List
- Young Engineer Resource Sheets

FOR DELEGATES

- Annual Business Meeting Materials
- Delegate Handbook
- Executive Director Report
- Grant Program Report
- MO Committee List
- MO Recommended Speakers
- MO Summary Report
- NCSEA Benefits to SEA Members
- NCSEA Committee Reports
- SE3 Resource Guide

FLORIDA AND NORTH CAROLINA EDUCATION SHEETS

After attending education sessions, visit the registration desk with your FL or NC license number to add your name to the list for education credits.

YOUNG ENGINEER RESOURCE SHEETS

The NCSEA Young Member Group Support Committee has developed resource sheets for some of the educational sessions at the Summit. These sheets provide additional presentation and resource information to assist young engineers as they listen to the presentations. Each engineer registered as a Young Engineer also receives these in their registration pack.

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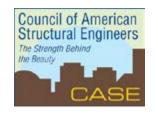


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Joyce VanWieren *Administrative Manager*

Partnering Organizations

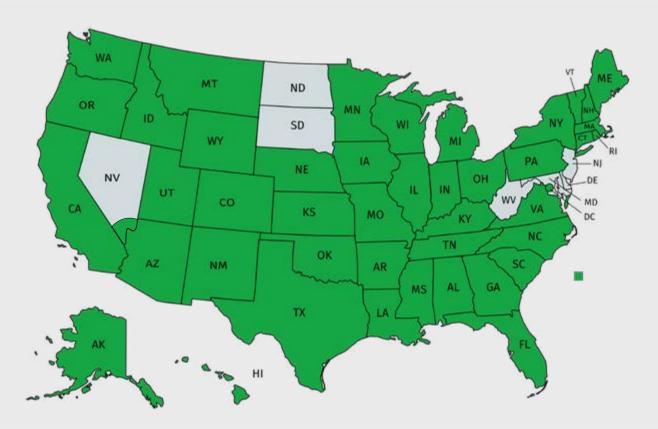








State Structural Engineering Associations/ NCSEA Member Organizations



Alabama SEAoAL
Alaska SEAAK
Arizona SEAoA
Arkansas SEAoAR
California SEAOC
Colorado SEAC
Connecticut SEC/CT
Florida FSEA
Georgia SEAOG
Hawaii SEAOH
Idaho SEAI
Illinois SEAOI

Louisiana SEAOL
Maine SEAM
Massachusetts SEAMass
Michigan SEAMI
Minnesota MNSEA
Mississippi SEAOMS
Missouri SEAKM
Montana SEAMT
Nebraska SEAON
Nevada SEASON
New Hampshire SENH
New Mexico SEANM
New York SEAONY
North Carolina SEA of NC

Kentucky SEAoK

Ohio SEAoO
Oklahoma OSEA
Oregon SEAO
Pennsylvania SEAoP
Rhode Island SEARI
South Carolina SEA of SC
Tennessee TNSEA
Texas SEAoT
Utah SEAU
Vermont SEAVT
Virginia SEAVA
Washington DC SEA-MW
Washington SEAW
Wisconsin SEA-WI
Wyoming SEAWY

Indiana ISEA

Kansas SEAKM

Iowa SEAIA



ASSOCIATE MEMBERS

American Wood Council

Fabreeka International, Inc.

Insurance Institute for Business & Home Safety

International Code Council

Metal Building Manufacturers Association Precast/Prestressed Concrete Institute

Simpson Strong-Tie Steel Tube Institute

USG Corporation - Structural Solutions

AFFILIATE MEMBERS

Allplan, Inc.

AISC

Alpine TrusSteel

Atlas Tube

AZZ Galvanizing

BDSVircon

Bekaert

Blind Bolt

Cast Connex Corporation

Chicago Clamp Co.

Cintec

Cold-Formed Steel Engineers Institute

Concrete Reinforcing Steel Institute

Construction Tie Products, Inc.

CoreBrace

DECON USA, Inc.

DeWALT

Freyssinet, Inc.

Geopier

Graitec

GRM Custom Products

Hayward Baker

Headed Reinforcement Corp. (HRC)

Hexagon PPM

Hilti, Inc.

IAMPO Evaluation Service

International Masonry Institute

ITW Commercial Construction

Lindapter USA

MeadowBurke

MIDASoft. Inc.

Mitek Builder Products

New Millennium Building Systems

Performance Structural Concrete Solutions

Pieresearch

Qnect

RISA Technologies

SE Solutions, LLC

SidePlate Systems

SkyCiv

Stabil-Loc Inc.

Steel Deck Institute

Steel Joist Institute

Strand7

Trimble

Vector Corrosion Technologies

Voss Engineering

SUSTAINING MEMBERS

4x Engineering

ARW Engineers

Barter & Associates, Inc.

Blackwell Structural Engineers

Burns & McDonnell

Cartwright Engineers

Collins Engineers, Inc.

Cowen Associates Consulting

Criser Troutman Tanner Consulting

CSA Knoxville

DCI Engineers

Degenkolb Engineers

DiBlasi Associates, P.C.

Dominick R. Pilla Associates

DrJ Engineering, LLC

ECM

Engineering Solutions, LLC

Gerald E. Kinyon

Gilsanz Murray Steficek

Glotman Simpson Consulting Engineers

GRAEF

Haskell

Holmes Culley

James Ruvolo

Joe DeReuil Associates

KBR

KOMA

Krech Ojard & Associates

LBYD, Inc.

LHB Inc.

Mainland Engineering Consultants

Corporation

Mainstay Engineering Group, Inc.

Martin / Martin, Inc.

Mercer Engineering PC

Morabito Consultants, Inc.

Mortier Ang Engineers

O'Donnell & Naccarato, Inc.

Omega Structural Engineers, PLLC

Professional StruCIVIL Engineers, Inc.

Rimkus Consulting Group

Ruby & Associates, Inc. Scovis PLLC

SES Group LLC

Simpson, Gumpertz & Heger

Sound Structures, Inc.

Stability Engineering

Structural Engineers Group

STV, Inc.

TEG Engineering, LLC

TGRWA, LLC

The Harman Group, Inc.

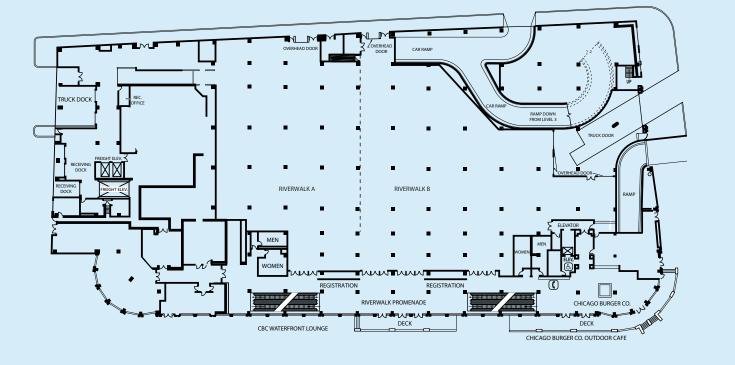
Thornton Tomasetti

Wallace Engineering

SHERATON GRAND FLOOR PLAN

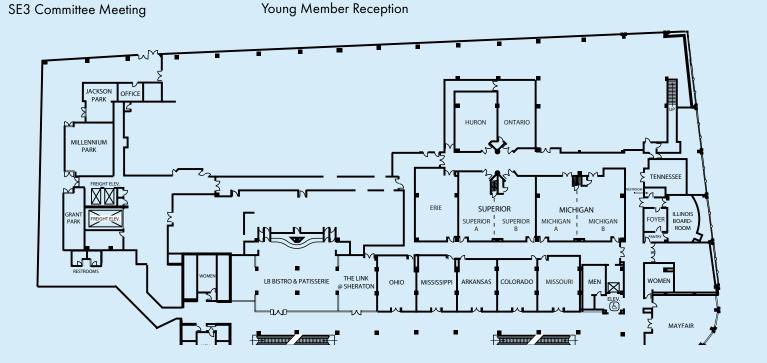
Level 1

WEDNESDAY	THURSDAY			FRIDAY
Registration Welcome Reception	Registration Breakfast	Lunch Refreshment Break	Registration Trade Show	Raffle Drawing Refreshment Break
SE River Cruise Boarding	Trade Show	Cocktail Reception		



Level 2

WEDNESDAY Communications Committee Meeting YMGSC Committee Meeting Publications Committee Meeting Committee Lunch FRIDAY Exhibitor Presentations Track 3



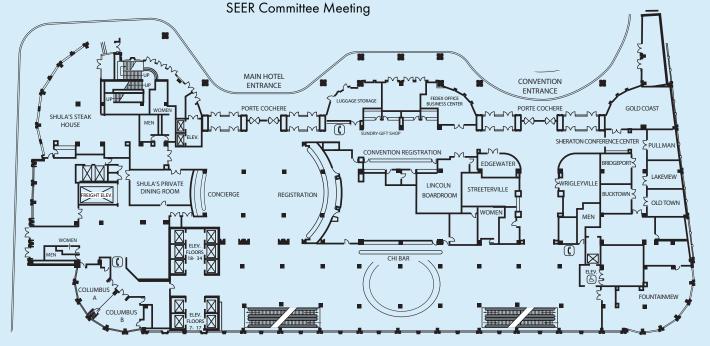
WEDNESDAY

FRIDAY

Atlas Tube Tour Bus Loading Code Advisory Committee Meetings Continuing Education Committee Meeting

CSi Event at Navy Pier Bus Loading Delegate Interaction Reception Structural Licensure Committee Meeting

Basic Education Committee Meeting



Level 4

THURSDAY

Delegate Leadership Breakfast Keynote Leadership Plenary Tracks 1-5

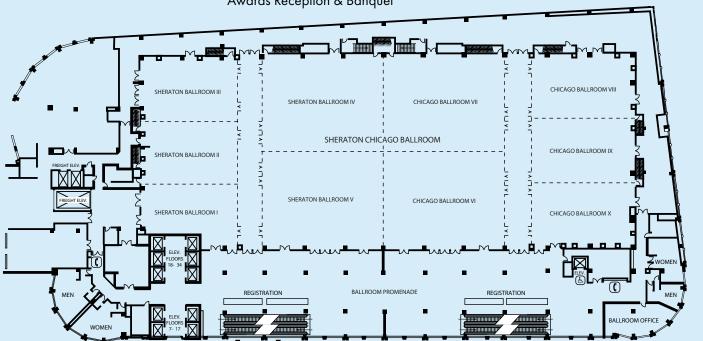
FRIDAY

Delegate Collaboration Breakfast Chicago and The Skyscraper Lunch Tracks 1, 2, 4

Awards Reception & Banquet

SATURDAY

Breakfast Annual Business Meeting



Wednesday, October 24, 2018

7:30 - 6:00 Level 1 Registration 8:00 - 4:00 **NCSEA Committee Meetings** 8:00-12:00 Level 2: Tennessee **Publications** Level 2: Arkansas 8:00-12:00 Communications Level 3: Oldtown 8:00-4:00 Code Advisory - Existing Buildings Code Advisory - Gen. Requirements Level 3: Lakeview 8:00-4:00 Level 3: Pullman 9:00-12:00 Code Advisory - Steering (Code Advisory Chairs only) Structural Licensure Level 3: Goldcoast 10:00-12:00 12:00-4:00 Code Advisory - IRC Level 3: Bridgeport 12:30-2:30 Continuing Education Level 3: Lincoln 1:00-4:00 Code Advisory Committee - Seismic Level 3: Wrigleyville Code Advisory Committee - Wind Level 3: Goldcoast 1:00-4:00 1:00-4:00 Code Advisory - Special Inspection/Quality Assurance Level 3: Pullman Level 2: Arkansas 1:00-4:00 Young Member Group Support Code Advisory - Resilience Level 3: Bucktown 1:00-4:00 2:00-4:00 Structural Engineer Emergency Response (SEER) Level 3: Streeterville Structural Engineering Engagement and Equity (SE3) Level 2: Tennessee 2:00 - 4:00 FRIDAY 8:30 - 12:30 Basic Education Committee Meeting Level 3: Bucktown

12:00-1:00 Committee Lunch Level 2: Mayfair

12:30-3:30 Atlas Tube Plant Tour Atlas Tube

Pre-registration required. Boarding begins at 12:15 p.m. Please remember your ticket when boarding. The tour will include an introduction on how HSS are made, common specification, applications and pitfalls to avoid; a safety briefing; and a plant tour led by a highly trained mill operator. Round trip bus transportation will depart at 12:30 pm from the lobby of the Sheraton and return by 3:30 pm.

4:00-5:00 YMG Reception Level 2: Mayfair

Young engineer attendees and the NCSEA Board of Directors only. The Reception will include recognition of the Summit Scholarship recipients as well as the presentation of the Young Member Chapter of the Year award.

4:00-5:30 Delegate Interaction Reception Level 3: Fountainview

NCSEA SEA Delegates, SEA Leadership and NCSEA Board of Directors only. This reception is the first event (of 3) for this group at the Summit, each event will focus on communicating with one another to assist in the growth of your organizations.

5:00-6:30 Welcome Reception on Trade Show Floor Level 1

All attendees invited! Held on the Trade Show floor, this reception is your first opportunity to meet with your peers.

6:00-7:30 Structural Engineering River Cruise 1 Level 1

Pre-registration required. Boarding begins at 5:30 p.m. Please remember your ticket when boarding.

8:30-10:00 Structural Engineering River Cruise 2 Level 1

Pre-registration required. Boarding begins at 8:00 p.m. Please remember your ticket when boarding.

This one-of-a-kind event, sponsored by Atlas Tube and brought to you by NCSEA and SEAOI, will feature special presentations about the architecture surrounding the river delivered by our personal docents of the evening.





Thursday, October 25, 2018

7:00 - 6:00 Registration Level 1
7:30-9:00 Delegate Leadership Breakfast with Presentation:
Increasing Member Engagement Through a
Turbo-Charged Strategy Debra Zabloudil
Delegates & SEA Leadership only.
Level 4: Chicago Ballroom 6
8:00-9:00 Attendee Breakfast on Trade Show Floor Level 1

8:00-6:30 Trade Show Floor Open Level



Level 4: Chicago Ballroom 8-10

9:00-10:30 Keynote: Always Striving for Better Ron Klemencic, P.E., S.E.

Engineering is an ever-evolving discipline. Advances in material science, construction methods, analytical tools and design methodologies continue to provide opportunities for improving on what has been accomplished in the past. The most impactful innovations tend to be supported by sound research and the collaboration of a broad group of stake holders. In his presentation, Ron Klemencic will review how some of the most impactful innovations in recent years were developed, and he will speculate as to what areas are ripe for the next wave of advancements.

Ron Klemencic is the Chairman and C.E.O. of Magnusson Klemencic Associates (MKA), has worked on projects in 25 states and 24 countries including multiple-block developments up to 11.5 million square feet and towers up to 112 stories. Ron has been the structural engineer-in-charge for more than 175 buildings over 27-stories-tall in 19 countries representing over 190 million square feet of space and over \$39 billion in construction cost. Ron is sought out internationally by developers, architects, and contractors for his creativity, "big picture" approach, and unique ability to consistently produce cost-effective, innovative designs. He continues to lead the advancement of performance-based seismic design of tall buildings through initiatives, such as the PEER TBI Guidelines and design of buildings such as the 1,070-foot-tall Transbay Tower in San Francisco.



10:30-12:00 Leadership Plenary: Influence Redefined...Be the Leader You Were Meant to Be, Monday to Monday Stacey Hanke Level 4: Chicago Ballroom 8-10

See yourself as others see you. Are you as good – or bad as you think you are when you communicate with influence? This presentation will help you persuade, sell, influence and communicate face-to-face with a clear message.

- Project confidence and credibility; build trust to be heard Monday to Monday®.
- Avoid rambling and get your point across to gain understanding and commitment.
- Communicate a consistent brand in all situations at all times
- Consciously and deliberately communicate in a way that influences others to take action.
- How-tos for holding yourself accountable

Stacey Hanke, founder of Stacey Hanke Inc., has trained over 15,000 people to rid themselves of bad body language habits and choose words wisely. She has delivered over 500 presentations for business leaders in the financial industry to the healthcare industry to government and everyone in between. Her client list is vast



from Coca-Cola, Kohl's, United States Army, Navy and Air Force, Leo Burnett, Nationwide, University of Chicago, Novartis, GE, General Mills, Blue Cross Blue Shield and Cardinal Health. In addition to her client list, she has been the Emcee for Tedx.

TRACK 1 – Thursday, October 25, 2018

1:15-2:15 Wind Design Beyond the Code Level 4: Chicago Ballroom 8

Emily Guglielmo, S.E.

This session is specially designed for the Windy City Summit. The practicing structural engineer is often confronted with wind designs that aren't explicitly addressed in the code. This session will identify the top frequently encountered situations, along with suggestions on how to address them.



Emily Guglielmo, Martin/Martin, Inc., has lectured on wind provisions across the nation. Emily is the secretary of the NCSEA Wind Engineering Committee and is a voting member of the ASCE 7 wind committee. A licensed S.E., Emily has received a

number of awards for effective instruction for practicing structural engineers.

2:15-2:30 Break

2:30-3:30 Design and Inspection Responsibilities for a Project Utilizing a Metal Building

Level 4: Chicago Ballroom 8

Greg Robinson, P.E., S.E., SECB; Dustin Cole, P.E., S.E.; W. Lee Shoemaker, P.E., Ph.D.

When a metal building is used for a project, design responsibilities are usually divided between the manufacturer and the engineer of record (EOR). Therefore, a clear understanding of their respective roles, as well as coordination and communication, are crucial for success. This presentation will provide guidance for an EOR with respect to specifying a metal building system, foundation design, and inspection services.

Greg Robinson, is a principal of LBYD and has more than 31 years of experience of structural design and project management.



Dustin Cole, is the Director of Engineering for Chief Buildings, a metal building manufacturer in Grand Island, Nebraska. He chaired the MBMA



committee that developed the Inspection Handbook for Metal Buildings.

W. Lee Shoemaker, is the Director of Research & Engineering for the MBMA. He directs the technical research and education programs and



has made numerous presentations on this topic.

3:30-4:00 Break on Trade Show Floor Level

4:00-5:00 Three Tools for More Efficient Seismic Design Level 4: Chicago Ballroom 8 Rafael Sabelli, S.E.

This presentation is geared to improve the efficiency of both the structural design and designer of the structure. Tools to simplify the seismic-design process are paired with tools to improve and simplify the design.



Rafael Sabelli, Walter P. Moore, is a Principal and Director of Seismic Design at Walter P Moore. He is the chair of the AISC Seismic Design Manual committee and was the Project manager for the 5-volume SEAOC Seismic Design Manual. Rafael is co-author of Ductile Design of Steel Structures and has written extensively on the design and behavior of steel seismic systems.

Download the 2018 Summit App!
Search "NCSEA Summit" in the Google Play Store or Apple App Store



Thursday, October 25, 2018 – TRACK 2

Lessons Learned from Safety Evaluation of Buildings after Windstorms 1:15-2:15

Level 4: Chicago Ballroom 9

Ed Huston, P.E., S.E.

Case studies of damaging storms and damage to structures will be used to highlight lessons learned which have changed building codes and design practice. Many of these lessons have been learned from post-disaster safety assessments of buildings, using ATC-45. Lessons have also been learned from post-disaster damage reconnaissance and large scale windtunnel studies. The possibility of extending current design practice, beyond the building code, based on exploration of recent tornado damage will also be presented.





Ed Huston is a civil engineering graduate of the University of Washington, Ed is a licensed civil and structural engineer in eight western states. He is chair of the Code Advisory Committee - General Requirements Subcommittee. Ed was the Lead Technical Consultant for the development of ATC-45.

2:15-2:30 Break

2:30-3:30 Update of ATC-20 Post-Earthquake Safety Evaluation of Buildings -Session 1 Level 4: Chicago Ballroom 9 Ayse Hortacsu, S.E. & Ed Huston, P.E., S.E.

Break on Trade Show Floor 3:30-4:00 Level 1

4:00-5:00 Update of ATC-20 Post-Earthquake Safety Evaluation of Buildings -Session 2 Level 4: Chicago Ballroom 9 Ayse Hortacsu, S.E. & Ed Huston, P.E., S.E.



These identical sessions will consist of a brief presentation on the available information of the ATC-20 update, and a workshop to solicit feedback from NCSEA Summit attendees on their personal observations and input on improvements that can be made to the ATC-20 methodology and implementation. Ayse Hortacsu (ATC Project Manager) and Ed Huston (ATC-20 Update Project Technical Committee member) will lead the workshop and solicit feedback from the attendees.

The ATC-20 methodology was first developed in 1989 and is the international defacto standard for the safety evaluation of buildings following damaging earthquakes. The most recent edition, ATC-20-1 Field Manual was published in 2005. The Applied Technology Council has recently initiated an update of the methodology with the objective to incorporate lessons learned from recent earthquakes and other natural hazard events, such as high wind and flood events, observed by structural engineers from around the United States.



Ayse Hortacsu, Applied Technology Council, a structural engineer and a Director for the Structural Engineers Association of Northern California (SEAONC). In her ten years at the Applied Technology Council, she has managed many projects, including the development of ATC-20 Field Manual for the country of Bhutan and the Third Edition of FEMA P-154, Rapid Visual Screening of Buildings for Potential Seismic Hazards: A Handbook.

TRACK 3 - Thursday, October 25, 2018

1:15-2:15 Zurich NA Headquarters and Marina City Renovations Patrick Ragan, S.E. & Brian Greve, P.E., S.E.

Level 4: Chicago Ballroom 10

The 783,800 square foot Zurich North America Headquarters is the largest build-to-suit office project completed in the Chicago area in the last 15 years, and is notable for it's unique form, which is comprised of three long rectangular bars. By replacing vertical columns with truss diagonals throughout the entire five-story upper bar office space, the full height of the space becomes structural depth for the trusses, resulting in a highly efficient long-span solution. The resulting structure has allowed this iconic piece of architecture to stand apart from its peers in the suburban office building landscape.



Patrick Ragan is an associate at WSP in Chicago. He is a member of SEAOI, ASCE, the ASCE Tall Buildings Committee, and the Task Committee on the Performance-Based Design of Tall Buildings under Wind Loads.



Brian Greve is an associate principal at Wiss, Janney, Elstner Associates, Inc. He has over 18 years of experience working on projects involving the assessment and repair of existing structures and facades He's also performed full-scale load tests of structures to verify the capacity of deteriorated and strengthened members.

2:15-2:30 Break

2:30-3:30 Wrigley Field Renovations & Chicago's First Tied Arch Bridge Level 4: Chicago Ballroom 10 Bill Bast, P.E., S.E., SECB & Soliman Khudeira, P.E., S.E., Ph.D.

This session will focus on the structural and geotechnical challenges associated with evaluating the design and condition of the 100-year old stadium, and the structural engineering behind the improvements designed by Thornton Tomasetti. The successfully completed 160 ft long and 80 ft wide parabolically-shaped Halsted Street Bridge over the Chicago River North Branch Canal demonstrates that a short-span tied-arch can be done economically with attention to the steel details that accommodates both constructibility and durability.



William D. Bast is a Principal at Thornton Tomasetti's Chicago office and is a leader in a group of structural engineers and technical architects focusing on building renovation work, forensic engineering, and property loss consulting services.



Dr. Soliman Khudeira is a Section Chief of Major Projects with the Chicago DOT and an Adjunct Professor at Illinois Institute of Technology (IIT). Dr. Khudeira is also a member of the Executive Board of the Structural Engineers Association of Illinois.

3:30-4:00 Break on Trade Show Floor Level 1

4:00-5:00 Chicago Riverwalk and Apple Store

Matt Johnson, P.E.; Andrian Parkinson, P.E., S.E.; Terry McDonnell, P.E., S.E.

Structural analysis and design of a new, flagship retail store inserted into a 1960's reinforced concrete parking garage, and under the existing Pioneer Court plaza. This session will discuss the clever ingenuity that was needed to fit a new store into an existing space as well as the custom approach necessary to accommodate new challenges.



Matthew H. Johnson is the Structural Engineering Division Head for Simpson Gumpertz & Heger's Chicago office. Matt leads a team of

engineers in the structural design and rehabilitation of buildings, the design of structurally complex building enclosures, and design of non-traditional structures including structured landscapes, temporary installations, and public art projects.



Adrian Parkinson is a Partner in the Structural Engineering group at Foster + Partners in London, where he works with teams of engineers,

architects, and specialists to achieve highly-integrated building designs. Adrian's fascination with the simultaneous beauty and function of structures led him to obtain art and engineering degrees, then a Master of Science in Structural Engineering from UC Berkeley in 1999.



Terry McDonnell is a Principal with Simpson Gumpertz & Heger in Chicago with over twenty years of structural engineering experience.

Level 4: Chicago Ballroom 10

Terry keeps up-to-date with engineering advances by actively participating in the City of Chicago High Rise Committee, the Glass use in buildings Standard ASTM E06 Committee, and the Standard Practice for the Design of Amusement Park Rides Standard ASTM F24 Committee.

Thursday, October 25, 2018 - TRACK 4

1:15-2:15 Standard of Care: in Theory and in Practice Jerry Maly, P.E.

This presentation is intended to provide guidance in understanding the nuances of the standard of care to practicing structural engineers and to structural engineers who serve as experts in evaluating the work of other professionals. The presentation will explore the various aspects of the commonly used definition of standard of care, review some general rules of law pertaining to the definition, compare standard of practice with standard of care, discuss bad outcomes verses negligence, and address construction that is not compliant with an engineer's plans and specifications. Finally, findings from real-world cases will be included in the presentation.

Level 4: Chicago Ballroom 6





Jerry Maly, is a Principal in the Denver, Colorado office of Wiss, Janney, Elstner Associates, Inc., and is a Professional Engineer in Colorado and Wyoming. He began his career as a design engineer in the 1970s, however his work over the past 30 years has focused on the investigation and repair of structural distress and failures. Mr. Maly has a B.S. in Civil Engineering (1975) from the University of Cincinnati, a M.S. in Civil Engineering (1979) from the University of Colorado, is a past president of the Structural Engineers Association of Colorado, and is a member of the Existing Buildings Subcommittee of NCSEA's Code Advisory Committee.

2:15-2:30 Break

2:30-3:30 Picture. Plan. Perform.: Ideas for Successful Business Development Level 4: Chicago Ballroom 6
Brad Thurman, P.E. & Dana Birkes

Building relationships with potential clients and strengthening bonds with current clients are critical in creating and maintaining a successful business. Whether you're a young engineer looking to enhance your career development or a seasoned professional with years of experience, this session will give you ideas you can use to be successful at business development.





Brad Thurman, is a Principal and CMO of Wallace Engineering and Dana Birkes is the VP of Business Strategies for Crossland Construction. Both help lead the marketing and business development efforts of their companies and have been heavily involved, including serving as national presidents, for the Society of Marketing Professional Services, a network of nearly 7,000 professionals dedicated to creating business opportunities in the A/E/C industry.

3:30-4:00 Break on Trade Show Floor

Level 1

4:00-5:00 Risk Management Claim Studies John Tawresey, S.E., F.TMS, F.SEI

Level 4: Chicago Ballroom 6

The subject of professional liability lies at the heart of our everyday life as practicing structural engineers - and the term "risk management" conjures up visions of contracts, attorneys and the courtroom, a vision that seldom connects with the daily practice of engineering. While contracts, attorneys and the courtroom are important, professional risk management also includes engineers knowing what activities, projects or problems to pursue and which ones to avoid, what level of quality is appropriate (standard of care) and how better to defend against allegations of negligent practice, both before and after a claim has been filed.



John G. Tawresey has over 40 years of experience as a structural engineer. He was the Chief Financial Officer at KPFF Consulting Engineers for 35 years and has extensive experience defending claims. He is a past president of The Masonry Society, past editor of the Masonry Society Journal, past president of the Structural Engineers Risk Management Council (SERMC), past chair of the SERMC Claims Committee, past president of the Structural Engineering Institute of ASCE, current member of the ASCE 7 Main Committee and TMS 402/602 Main Committee and is a member of the National Technical Programs Committee for SEI. He has taught a senior level masonry design course for 30 years as an adjunct professor at the University of Washington.

YOUNG ENGINEER EDUCATION – Thursday, October 25, 2018

1:15-2:15 The Devil's in the Details: Connection Design Swapnil Deshpande, P.E., LEED AP BD+C

Most engineering education focuses on the design of components: beams, columns, walls, and slabs. Most engineering failures involve connections, details, and other "incidental" components of our work. While universities provide a basic education of structural behavior and design, the most challenging part of our work, detailing, is rarely touched on. Detailing is what furnishes a complete load path.

Level 4: Chicago Ballroom 7



Swapnil Deshpande is a senior associate in Thornton Tomasetti's Kansas City Office. Swapnil has over 12 years of experience designing structural steel connections for a wide range of projects including arenas, stadiums, hospitals,

and industrial structures.

Level 4: Chicago Ballroom 7

2:15-2:30 Break

2:30-3:30 How to be an (Effective) Project Manager Howard Birnberg

Engineering project management is an extremely broad subject ranging from detailed technical areas to intuitive people skills. Project managers (PMs) must be effective in dozens of skills if they are to successfully lead a project from conception to use and beyond. Unfortunately, very few individuals enter engineering professions intending to become project managers. This session will focus on some key topics to make PMs more successful in their role.

Howard Birnberg is the executive director of the Association for Project Managers, an international organization of project managers in the design and construction industry. He is a frequent speaker on project management for many industry professional associations and design and facilities firms.

3:30-4:00 Break on Trade Show Floor Level 1

4:00-5:30 Mentor Roundtable: NCSEA Leaders
Moderated by Brian Petruzzi, YMGSC

Level 4: Chicago Ballroom 7

Restricted to Young Engineers. The Young Member Group Support Committee (YMGSC) thrives on mentoring the future professionals and leaders of our organization. This roundtable will consist of tables with 5 to 8 young members and a mentor that will answer questions. The mentors will rotate at the call of a moderator to allow all attendees to meet each of the mentors. Our mentors are professional engineers and entrepreneurs interested in sharing experiences and advising young members.

The mentors for this session are:

NCSEA Basic Education Committee Craig Barnes, CBI Consulting, Inc.

NCSEA Code Advisory Committee Thomas DiBlasi, DiBlasi Associates, PC

NCSEA Communications Committee Ed Quensenberry, Equilibrium Engineers

NCSEA Continuing Education Committee Carrie Johnson, Wallace Engineering NCSEA SEER Committee

Scott Nacheman, DeSimone Consulting Eng. Colby Baker, SEA, Ltd

NCSEA SE3 Committee

Angie Sommer, ZFA Structural Engineers Nick Sherrow-Groves, Arup

NCSEA Structural Licensure Committee Kristin Killgore, FSB

NCSEA YMG Support Committee Brian Petruzzi, Thornton Tomasetti Computers & Structures, Inc. Ashraf Habibullah

4:45-6:30 Cocktails on the Trade Show Floor Level 1

7:00-11:00 A Celebration of Structural Engineering Navy Pier: 600 E Grand Ave, Chicago, IL 60611

Hosted by Computers & Structures, Inc., and held at one of Chicago's top attractions, Navy Pier. This extravagant event includes dinner, champagne, and live music, that will be enjoyed with extraordinary views of the lake and Chicago's magnificent skyline. Come celebrate the immeasurable contributions of the structural engineering profession and the ways in which structural engineers are essential to the progress of society while experiencing the architecturally stunning environment that showcases the vitality of Chicago. Transportation will be provided.



Friday, October 26, 2018

7:00 - 4:00 Registration Level 1

7:30-10:30 Delegate Collaboration Breakfast

Delegates & SEA Leadership only.

Level 4: Chicago Ballroom 6

7:30-8:00 Attendee Breakfast on Trade Show Floor

7:30-12:00 Trade Show Floor Open

8:00-10:10 Exhibitor Presentations:

TRACK 1 Level 2: Ohio

8:00-8:25 Trimble

Tekla Structural Designer is a modern BIM-compliant analysis and design software for structural engineers. This presentation will show how it looks when modern technology is incorporated into your workflow and allowing you to save a lot of time!

8:35-9:00 SkyCiv

SkyCiv is a new structural analysis and design software, hosted completely on the cloud. In this introduction demonstration, SkyCiv will explore what it means to be on the cloud and its benefits. We will also demo SkyCiv Structural 3D with its easy modelling, integrated design modules and full calculation reports.

9:10-9:35 Lindapter

Learn about Lindapter's secure and proven alternative to field drilling and welding for steel-to-steel connections. From their ICC-ES approved Hollo-Bolt blind expansion fasteners, to their ICC-ES pending beam-to-beam Girder Clamps, to their FloorFast/Grate-Fast steel floor plate/grating fasteners, Lindapter has an innovative design solution for you.

9:45-10:10 ASCE

This presentation will highlight ASCE's newest online tools designed to make working in the Standard a faster, easier experience. ASCE 7 Online provides digital access to Standard ASCE 7-16 and ASCE 7-10 The ASCE 7 Hazard Tool provides hazard data for seven environmental hazards for a specific location.

TRACK 2 Level 2: Colorado

8:00-8:25 Giza Steel

Join GIZA for a quick overview of our steel connection design software. We will highlight the different types of connection and design codes we cover as well as our reporting output which is a customer favorite. All attendees will receive a small thank-you gift for attending.

8:35-9:00 Freyssinet

Freyssinet specializes in the repairing and strengthening of structures, through the design and/or implementation of proven certified solutions. Our vast solutions experience enables us to understand the most unusual of jobsite circumstances while offering safe, economical and durable mechanical strengthening and material treatment solutions to meet client needs.

9:10-9:35 MiTek

The purpose of this presentation is to share the research and development of a new lower cost moment frame option engineers can use to resolve their lateral load challenges while providing cost savings to owner. Other low cost approaches to increase lateral and seismic performance of wood frame structures will be discussed including the use of fluid viscous dampers.

9:45-10:10 LaFargeHolcim

This presentation will discuss Ultra-High Performance Concrete (UHPC) and Self-Consolidating Concrete (SCC), two enhanced concretes that are seeing increased use in structural applications. This presentation will summarize typical characteristics and potential applications of these forms of concrete.

TRACK 3 Level 2: Missouri

8:00-8:25 RISA

Learn how the RISA Building System allows engineers to easily analyze and design all aspects of multi-story buildings through the use of RISAFloor, RISA-3D, RISAFoundation and RISAConnection.

8:35-9:00 MeadowBurke

Learn about methods to eliminate disruptive closure strips from PT slabs. This presentation will address how shear dowels are used to eliminate the need for costly, disruptive and hazardous closure strips in post tension slabs. Additional detail will show how shear dowels can be designed to resist vertical and lateral shear loadings as well as tensile forces in these applications.

9:10-9:35 Bekaert

Bekaert's Dramix steel fibers are changing the market of reinforced concrete in North America. See how Bekaert's unmatched technology is leading the way in providing innovative, cost effective, and stronger solutions with our patented Dramix 4D and 5D fibers.

9:45-10:10 AZZ Galvanizing

The purpose of this presentation is to inform and educate engineers about Hot-Dip Galvanized steel and how it can address the growing corrosion problem throughout North America. The presentation will describe how zinc coatings, specifically Hot-Dip Galvanizing, can protect against steel corrosion and will share current case studies of HDG projects over 50 years old with no maintenance to date.

TRACK 4 Level 2: Mississippi

8:00-8:25 Dlubal

Experience the most efficient and user-friendly structural software RFEM with a design example using the AISC design code and an indepth stress analysis of a connection using non-linear FEA capabilities. Photorealistic model rendering, CAD-like modeling, and complete code checks let you see how RFEM takes you beyond your current design solution.

8:35-9:00 Peikko

For the first time ever, designers can now leverage the benefits of both steel and concrete to offer a completely exposed steel structure requiring no fireproofing, a substantial reduced depth of floor assemblies and minimum onsite installation labor.

9:10-9:35 Fyfe

Fyfe is a manufacturer, providing engineering support, training, and production of specialty construction products. We will be reviewing the Tyfo fiber wrap system which are advanced composite materials used for retrofit and repair of structural elements.

9:45-10:10 CHANCE

Participants will learn about the application and use of CHANCE® brand Helical pile foundations and anchors. Topics will cover where and how helical piles are used and installed today, and the basics of design; including pile types, bearing capacity, installation equipment, structural design, advantages/disadvantages, and specifications.

Friday, October 26, 2018

10:30-11:00 Refreshment Break & Raffle Drawing on Trade Show Floor Level 1

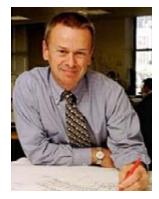
11:00-12:00 Chicago and the Skyscraper—A Look at Chicago's Role in the History and Future of Structural Engineering of the Skyscraper Level 4: Chicago Ballroom 8-9

Bill Baker, P.E., S.E., and John Zils, S.E.

Chicago, home to influential structural engineering practices, has a rich history and a prominent role moving forward in both the architectural and structural design of skyscrapers. Integral to the First and Second Chicago Schools was innovation in the structural engineering design of tall buildings that informed architectural design. That innovation continues to be present through both physical buildings and engineering practices in Chicago and will inspire future design of tall buildings in Chicago.



William Baker is a Structural Engineering Partner in the Chicago office of Skidmore, Owings and Merrill where he's practiced since 1981. Bill's a recognized leader in the design of tall buildings and led the structural engineering efforts for a number of high-rises including the Burj Khalifa in Dubai and the AT&T Corporate Center in Chicago.



John Zils in a career at SOM spanning more than 40 years, Zils led the structural engineering design on noteworthy projects in Chicago and worldwide including the Willis Tower, the Hajj Terminal in Jeddah, Saudi Arabia, and the Guggenheim Museum in Bilbao, Spain.

12:00-1:15 Lunch with Keynote Level 4: Chicago Ballroom 6-7
Inspiring the Next Generation of Structural Engineers to Lead, Influence, and Inspire
Ashraf Habibullah, S.E.

In a changing world of disruptive technologies such as artificial intelligence (AI), machine learning, nanotechnology and 3D-printing, is the structural engineering profession positioned to adjust to the impact of these technology-driven ways of the future? The presentation will discuss how the structural engineer's education and role must change if our profession is to triumph and flourish in these rapidly-changing times, and why engineering students need to be exposed to much more than just our technology if they are to fully leverage the limitless potential of the profession.



Ashraf Habibullah is a Structural Engineer and President of the software company Computers and Structures, Inc. For the past 40 years he has lead the development of technology and software that is used by thousands of structural engineering firms in over 160 countries. Ashraf also has a keen passion for the arts, and is a co-founder of the Diablo Ballet and the founder of the Engineering Alliance for the Arts, an organization that involves school children with technology, focusing on the artistic aspects of bridge engineering.



Friday, October 26, 2018 – TRACK 1

1:30-2:30 PCI Design Handbook - 8th Edition Content & Updates

Level 4: Chicago Ballroom 8

Jared Brewe, Ph.D., P.E., S.E.

The updated 8th Edition PCI Design Handbook is the leading collection of industry knowledge on the design, fabrication, and construction of architectural and structural precast and prestressed concrete. The 8th Edition includes updated code references, incorporates recent PCI sponsored research, and reflects the current industry standard practices. This presentation will discuss the content and updates to the 8th Editions and will be informative for those both unfamiliar and knowledgeable about precast and prestressed construction.



Jared Brewe is a Structural Engineer with Simpson Gumpertz & Heger in Chicago, IL where he applies analytical knowledge to investigate existing structures and determine cause of structural failures. He is a member of numerous ACI, ASCE/SEI, and PCI committees including ACI 318 Subcommittee G – Precast and Prestressed Concrete and the PCI Industry Handbook committee. Dr. Brewe earned his BS, MS, and PhD in Civil Engineering from Missouri University of Science and Technology in Rolla, MO and is a licensed professional engineer in several states and a licensed structural engineer in Illinois.

2:30-2:45 Break

2:45-3:45 Force Transfer Around Openings for Wood Framed Shear Walls Level 4: Chicago Ballroom 8
Alese Ashuckian, P.E., LEED, AP

The overall strength of a building is a function of all the components - roofs, walls, floors, and foundations - working together as a unit. The session provides a top to bottom overview of lateral design for wood framed structures. Topics of discussion will include lessons learned from natural disasters, structural load-path continuity, and APA developments in Force Transfer Around Openings. Illuminating APA's joint research project with the University of British Columbia and the USDA Forest Products Laboratory, where multiple shear wall design methodologies in accordance with the IBC were tested for walls with openings, which resulted in the creation of a new Force Transfer Around Openings Design methodology. The project's outcomes are detailed in APA Technical Note: Design for Force Transfer around Openings, T555, which guides users on the application of this new methodology to provide a structurally sound and efficient shear wall system and APA's FTAO Calculator, a free Excel spreadsheet available online. This course will highlight this research, testing and tools to educate attendees on this new FTAO methodology.



Alese Ashuckian is an Engineered Wood Specialist for APA – The Engineered Wood Association in the California, Nevada, and Utah regions. Her duties include consulting with designers, contractors and code officials to support the correct design and installation of wood-framed systems.

3:45-4:00 Break Level 4: Chicago Ballroom East Foyer

4:00-5:00 2018 NDS for Wood Construction - Significant Changes

Michelle Kam-Biron, P.E., S.E., SECB

This presentation will provide an overview of the significant changes in AWC's National Design Specification® (NDS) for Wood Construction. The 2018 NDS references ASCE/SEI Standard 7-16 Minimum Design Loads and Associated Criteria for Buildings and Other Structures which includes increased wind loads that include a significant increase in Components and Cladding (C&C) roof wind pressures. Participants will learn about changes in the 2018 NDS to address increased wind loads and gain an overview of the standard.



Michelle Kam-Biron is a California licensed structural engineer and Senior Director of Education for the American Wood Council (AWC), has authored several articles and white papers related to wood construction and has over 20 years of experience managing, designing and plan reviewing a wide range of projects of various structural material. Ms. Kam-Biron graduated from Cal Poly, San Luis Obispo with a BS in Architectural Engineering, is a certified Earthquake Disaster Assessment volunteer and a member of the International Code Council.

TRACK 2 – Friday, October 26, 2018

1:30-2:30 ICC / NCSEA Disaster Response Programs Colby Baker, P.E.

Level 4: Chicago Ballroom 9

NCSEA and ICC have joined together to develop a national response platform that will build on the existing NCSEA SEER Program and maintain a database of volunteers that can be called upon in the post-disaster environment to help with Damage/Safety Assessments (Placarding) and Building Department recovery efforts. This presentation will introduce and discuss the ICC / NCSEA program along with other resources available via Mutual Aid agreement.

With input and experiences provided by our deployed members and building officials assisted during Hurricanes Harvey, Irma, and Maria this presentation will also share specific success stories from the 2017 and 2018 Hurricane Seasons.



Colby Baker is a forensic engineer with SEA, Ltd., where he performs investigations related to construction defects, structural failures and collapses, wind and flood damage, roofing system failures, truss damage, foundation damage, water intrusion, and flooring damage (among other things). Mr. Baker currently serves as a Structures Specialist with the NC-TF3 Urban Search & Rescue Team, and previously served both as a Structures Specialist with the MI-TF1 Urban Search & Rescue Team, and as an on-call firefighter/EMT with the City of Farmington Hills. He is a member of the NCSEA Structural Engineers Emergency Response (SEER) Committee and is the SEER

Committee Chair for the Structural Engineers Association of North Carolina.

2:30-2:45 Break

2:45-3:45 Snow Drift Loading - Current Provisions and Future Direction

Michael O'Rourke, Ph.D., P.E.

Learn about current and potential future ASCE 7 procedures for snow drift loading from the former chair of the subcommittee. Attendees will have the opportunity to ask snow drift questions that have arisen in your practice.



Level 4: Chicago Ballroom 9

Michael O'Rourke chaired the ASCE 7 Snow & Rain Loads subcommittee responsible for snow & rain provisions in ASCE 7-98, 7-02, 7-05, 7-10, and 7-16. He is the author of dozens of articles on snow loads and several guidelines including the recently completed "Snow Loads on Solar Paneled Roofs".

3:45-4:00 Break Level 4: Chicago Ballroom East Foyer

4:00-5:00 Design and Testing of Facade Access Equipment Level 4: Chicago Ballroom 9 Gwenyth Searer, P.E., S.E.; Jonathan Lewis, S.E.; & Kurt Holloway, P.E., S.E.

This presentation provides an overview of the various types of facade access equipment that structural engineers must design their structures to support. Design loads from OSHA, IBC, and ASCE 7 are presented, along with real-world examples of facade access designs. Common pitfalls in implementation of the requirements are also presented. Presentation will culminate with a live, full-scale load test of a representative facade access anchorage.



Gwenyth Searer is a licensed structural engineer who specializes in facade access and who was instrumental in adding facade access

loads to both the International Building Code and to ASCE 7-16.



Jonathan Lewis is a licensed structural engineer who has evaluated facade access at numerous buildings in the Chicago area as well



Kurt Holloway is a licensed structural engineer who has evaluated and designed facade access systems for numerous facilities.

Friday, October 26, 2018 – TRACK 3

Level 3: Superior

1:30-2:30 Structural Engineering Licensure

Alan Kirkpatrick, P.E.

Why do structural engineers feel they are better than other engineers? What is a significant structure? Is structural engineering licensure creating an unnecessary burden? All of these plus more will be discussed and debated as the business of structural engineering licensure is explored and explained.



Alan Kirkpatrick is a Principal at Kirkpatrick Forest Curtis, PC in Oklahoma City. Mr. Kirkpatrick is a co-chair of the SE Licensure Committee for the National Council of Structural Engineers Associations and has served on the SE Licensure Rationale Committee for the Structural Engineering Institute of ASCE as well as the SE Task Force for the Oklahoma Structural Engineers Association.

2:30-2:45 Break

2:45-3:45 Special Inspections and Observations: Level 3: Superior "Power Tools" for Modern Engineers

Mariola Sullivan, P.E.

Special Inspections and Structural Observations are required by building codes for any commercial and residential projects designed using IBC. Do you know what are Structural Engineer's roles and authorities? What are 2018 IBC Chapter 17 changes? Who determines what Special Inspections are required? Who employs and pays for Special Inspections? This is a review session about roles and authorities of an engineer in SI program, and how these tools can be used in alternate design/construction applications and/or existing building alterations.



Mariola Sullivan has been involved in professional practice of engineering (design, project management, plan reviews, inspections, building code enforcement) for 20 years. Among various roles, she managed commercial inspections and building safety code-enforcement for City of Phoenix, AZ. Currently, she manages projects at Austin Bergstrom International Airport for City of Austin, TX and is appointed Board Member on Texas Department of Licensing and Regulations Code-Enforcement Officers Advisory Board. She is also involved in ongoing code-development efforts.

3:45-4:00 Break Level 4: Chicago Ballroom East Foyer

4:00-5:00 Structural Engineering Engagement and Equity (SE3):
2018 Survey Results Level 3: Superior

Nick Sherrow-Groves, P.E. & Angie Sommer, P.E.

This presentation will highlight the work being done by the Structural Engineering Engagement and Equity (SE3) Committee, with focus on the results of their 2018 survey on staff engagement and demographic equity. Attendees will leave the presentation with an understanding of some of the issues of engagement and equity facing our profession, as well as a set of recommended best practices to help improve both their firms and the profession as a whole.



Nick Sherrow-Groves is a Senior Engineer at the San Francisco office of Arup. Nick has been part of SE3 since 2015, first as a member of the SEAONC chapter, then as that

chapter's co-chair, and most recently as one of the co-chairs of the NCSEA SE3 committee.



Angie Sommer is an Associate at ZFA Structural Engineers in San Francisco, California. She was the 2016-17 co-chair of the SEAONC Structural Engineering Engagement and Equity (SE3)

Committee and is currently the inaugural cochair of the national NCSEA SE3 Committee.



TRACK 4 - Friday, October 26, 2018

1:30-2:30 It's Not Just Paperwork - Effective Onboarding & Training Carrie Johnson, P.E.

Level 4: Chicago Ballroom 10

By failing to get new hires integrated effectively, businesses face steep turnover rates and retention troubles. The typical onboarding process involves introducing the employee to a myriad of forms on the first day and then sending them right to work. The employee, particularly new hires, may feel unsure of what they are doing and consequently never feel quite comfortable in your organization. This presentation discusses positive ways to revamp your company's process.



Carrie Johnson is a principal of Wallace Engineering Structural Consultants, Inc, a structural and civil engineering firm with offices in Tulsa, OK, Kansas City, MO, Oklahoma City, OK, Denver, CO, and Atlanta, GA. She serves as the company's Chief Information Officer. She

received her Bachelor or Architectural Engineering and Master of Architectural Engineering from Oklahoma State University. She is a licensed engineer in forty-three states.

2:30-2:45 Break

2:45-3:45 What Really Matters for Success in Your Career Ben Nelson, P.E.

Level 4: Chicago Ballroom 10

What matters to success in your career is so much more than your technical competence, educational background, productivity and other 'hard' skills. What really matters most for your advancement are more indirect 'soft' skills not often discussed directly in school or engineering firms. This session focuses on ten things that really matter most in your development and eventual advancement.



Ben Nelson has been practicing structural engineering for 34 years, all with the same firm in Colorado. He is Director of the Structural Engineering division of Martin/Martin, a 225 person firm offering structural, forensic and civil engineering based in Lakewood, Colorado.

He is past-President of the Structural Engineers Association of Colorado, served on the NCSEA Board of Directors for 8 years and was President of NCSEA in 2012.

3:45-4:00 Break Level 4: Chicago Ballroom East Foyer

4:00-5:00 Structural Engineering Ethics: Doing the Right Thing & Knowing Why

Kevin Sido, J.D. & Elyse Ryan, J.D.

Level 4: Chicago Ballroom 10

Ethical issues can cause much stress and if handled poorly they can even cost you your license. While much of ethics is instinctual to the structural engineer, what about all those statutory rules for each state of licensure? How do the codes of ethics of your organizations apply? Kevin Sido and Elyse Ryan will be your guides for designing your ethical policies and practices.





Kevin Sido and **Elyse Ryan** have often spoken on ethics for engineers. As attorneys who represent design professionals in litigation, contracts, and ADR, they call upon their experience and expertise in the field of ethics in helping engineers resolve ethical questions in their day-to-day practice.

6:00-7:00 Awards Reception Level 4: Chicago Ballroom 6-7

7:00-10:00 NCSEA Awards Banquet

Level 4: Chicago Ballroom 6-7



Saturday, October 27, 2018

7:30 - 8:00 Breakfast Level 4: Chicago Ballroom 10

8:00-12:00 Annual Business Meeting Level 4: Chicago Ballroom 10

All attendees are invited to attend, especially those that are a part of their SEA's leadership and board.



SEAOI AWARDED WISE & SEF SCHOLARSHIPS TO THE 2018 NCSEA SUMMIT

Congratulations to the 2018 SEAOI WiSE Scholarship Recipients:

- Emily Larson, Burns & McDonnell
- Mary Lou Kutska, Ciorba Group
- Joseph Porada, Thornton Tomasetti
- Eduardo Prieto, Cordogan Clark & Associates
- Marcus E. Woods, Owens and Woods Construction Services

These awards are presented by the Structural Engineers Association of Illinois and SEAOI Women in Structural Engineering (WiSE).



The mission of SEAOI is to champion excellence for its members in the practice of Structural Engineering. Connecting professionals in a mutual learning environment is one of the vehicles SEAOI uses to advance excellence in the field of engineering. SEAOI's Women in Structural Engineering (WiSE) supports that mission by providing a forum for networking in the context of educating our members.

Congratulations to the recipients of the 2018 Structural Engineers Foundation Student Summit Scholarship!

These scholarships are available to students currently enrolled in an engineering program and are awarded based on their essay response to the question "What do you think it means to be a Structural Engineer?"

The Structural Engineers Foundation is an independent, non-profit charitable organization dedicated to one goal: the advancement of structural engineering. To attain this goal, and thus prepare for



tomorrow's horizons, the SEF has committed itself to sponsoring and funding scholarships, lectures, awards, publications and research - all aimed at improving structural engineers and structural engineering.



UPCOMING 2018–2019 WEBINARS

Learn more by visiting www.ncsea.com.

November 7, 2018

California Office of Emergency Services (CalOES) Safety Assessment Program (SAP)

Jason Spotts, P.E.

The California Office of Emergency Services (CalOES) Safety Assessment Program (SAP), hosted by NCSEA, is highly regarded as a standard to train emergency second responders. This SAP training course provides engineers, architects and code-enforcement professionals with the basic skills required to perform safety assessments of structures following disasters. Licensed design professionals and certified building officials will be eligible for SAP Evaluator certification and credentials following completion of this program and submission of required documentation. The fee for this course has been lowered by more than 40%. Register on www.ncsea.com.

November 1, 2018

Taking Wood to the Next Level – Application & Design of NLT and CLT

Michelle Kam-Biron, P.E., S.E., SECB

November 13, 2018

Engineering Structural Glass, an Introduction to the Engineering Structural Glass Design Guide

Marcin March, P.E., C.Eng, MIStructE, M.Eng, MRes

November 29, 2018

Changes to the 2016 TMS 402/602 Building Code for Masonry Structures

Richard Bennett, Ph.D., P.E.

December 6, 2018

New Solutions in the New Design Guide 21 on Welding

Duane Miller, Sc.D., P.E.

December 11, 2018

Understanding the AISC Direct Analysis Method of Design

Donald White, Ph.D.

January 15, 2019

Making Money: Design Services, Budgeting & Scope Management

Howard Birnberg

January 22, 2019

Resilient Design & Risk Assessment Using the Quantitative &

Building-Specific FEMA P-58 Analysis Method

Curt Haselton. Ph.D., P.E.

January 29, 2019

Ethics in the Practice of Engineering

Robert Kirkman, Ph.D.

February 12, 2019

Insurance & Indemnification: What You Don't Know Can Cost You

Gail Kelley, P.E., Esq., LEED AP

February 26, 2019

Code Compliance & Existing Structures

Patrick Sparks, P.E.

Register for webinars on www.ncsea.com/education/webinar

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2018 Excellence in Structural Engineering Awards

The NCSEA Excellence in Structural Engineering Awards annually highlights some of the best examples of structural engineering ingenuity throughout the world. Projects are judged on innovative design, engineering achievement and creativity.

Each winner will have a poster displaying their project throughout the Summit. The outstanding winner from each category will be announced at the NCSEA Awards Banquet on Friday night. Do you want to attend, but didn't purchase a full registration or ticket? Visit the registration booth!

Congratulations to this year's winners!

CATEGORY 1: NEW BUILDINGS < \$20 MILLION

A. Zahner Company Engineering Office - Kansas City, MO

Wallace Engineering - Structural Consultants, Inc.

Ocosta Elementary School and Tsunami Evacuation Tower - Westport, WA

Degenkolb Engineers

St. Luke's School Expansion - New York, NY

Silman

CATEGORY 2: NEW BUILDINGS \$20 MILLION TO \$100 MILLION

Austin Central Library - Austin, TX

Datum Engineers

Bahá'í Temple of South America - Santiago, Chile

Simpson Gumpertz & Heger

Intuit - Mountain View, CA

Holmes Structures

CATEGORY 3: NEW BUILDINGS > \$100 MILLION

King Abdulaziz International Airport - Jeddah, Saudia Arabia

Arup

Salesforce Tower - San Francisco, CA

Magnusson Klemencic Associates (MKA)

University of Texas Engineering Education and Research Center - Austin, TX

Datum Engineers/Datum Gojer Engineers

CATEGORY 4: NEW BRIDGES OR TRANSPORTATION STRUCTURES

Gut Bridge Replacement - South Bristol, ME

Hardesty & Hanover

Lincoln Avenue Pedestrian Bridge - Lone Tree, CO

Thornton Tomasetti

Nigliq Bridge - Colville River, AK

PND Engineers Inc.

CATEGORY 5: FORENSIC/RENOVATION/RETROFIT/REHABILITATION STRUCTURES < \$20 MILLION

E. Claire Raley Studios for the Performing Arts - Sacramento, CA Buehler & Buehler Structural Engineers, Inc.

Hotel Nikko Pre-Northridge PJP Column Splice Repair - San Francisco, CA Degenkolb Engineers

Preservation and Seismic Strengthening of Congregation Sherith Israel - San Francisco, CA Wiss, Janney, Elstner Associates, Inc.

CATEGORY 6: FORENSIC/RENOVATION/RETROFIT/REHABILITATION STRUCTURES > \$20 MILLION

Aramark Headquarters - 2400 Market Street Renovation and Overbuild - Philadelphia, PA
The Harman Group

Many Glacier Hotel - Glacier National Park, Babb, MT JVA, Inc.

Polynesian Cultural Center Renovation - Laie, HI J.M. Williams & Associates, Inc

University of Connecticut Downtown Hartford Campus - Hartford, CT

CATEGORY 7: OTHER STRUCTURES

Halo Board at Mercedes-Benz Stadium - Atlanta, GA

The Grant Street Pier - Vancouver, WA Martin/Martin Consulting Engineers

Wiikiaami - Columbus, IN Pierce Engineers, Inc.

Entries for the 2019 Excellence in Structural Engineering Awards will be due July 16, 2019. Structural engineers and structural engineering firms are encouraged to enter the program. More information, including entry requirements and judging criteria, can be found on www.ncsea.com.









2018 NCSEA Special Awards Honorees

The Special Awards honor NCSEA members who have provided outstanding service and commitment to the association and to the structural engineering field. These awards will be presented at the Awards Banquet on Friday evening. Congratulations!

NCSEA Service Award

The award is presented to an individual who has worked for the betterment of NCSEA to a degree that is beyond the norm of volunteerism. It is given to someone who has made a clear and indisputable contribution to the organization and the profession.



Barry Arnold P.E., S.E., co-owner and vice-president of ARW Engineers, has been a practicing structural engineer for 29 years. He served on the Board of the Structural Engineers Association of Utah (SEAU) for 5 years and was president in 2004. He also served on the Board of Directors of the National Council of Structural Engineers Associations (NCSEA) for 7 years and was the 2014-2015 president. In 2007, Barry was selected as the Engineer of the Year by the Utah Engineers Council.

Barry has supported the structural engineering profession by serving on several SEAU Committees, including: Wind Committee, Seismic Committee, and the Structural Licensing Committee (acting as Co-chair). He currently serves on NCSEA's Structural Licensing Committee, and has also served as chair of NCSEA's 2006 Annual Conference (Summit) Committee, and as SEAU's Delegate to NCSEA since 2006. Barry is the current Editorial Chair for STRUCTURE Magazine and has contributed numerous articles over the years. He has presented sessions on ethics, structural licensure, base plate design, and temperature effects on steel structures at dozens of conferences nationwide.

Robert Cornforth Award

The award is presented to an individual for exceptional dedication and exemplary service to an NCSEA Member organization as well as to the structural engineering profession.



Ryan A. Kersting, S.E., is an Associate Principal at Buehler with over 20 years of experience specializing in performance-based seismic design and evaluation of various types of buildings. He earned his Bachelor's degree from Cal Poly, San Luis Obispo and his Master's degree from University of California, Davis.

Throughout his career, Ryan has consistently served our profession through activities with SEAOC, ATC, NCSEA, ASCE, and other organizations. He is highly respected for his technical expertise, thoughtful leadership, and commitment to the profession. Ryan has served as SEAOC President (2014-15); was on the SEAOC Seismology Committee for many years including serving as Chair (2010-11); was SEAOC Convention Committee Chair (2007); and is currently Chair of SEAOC's Legislative Committee (2013+). In this most recent role, Ryan's active advocacy and tireless effort has extended the influence of SEAOC and our profession, beyond building codes and design projects, into the realm of public policy.

Susan M. Frey NCSEA Educator Award

This award, established to honor the memory of Sue Frey, one of NCSEA's finest educators, is presented to an individual who has a genuine interest in, and extraordinary talent for, effective instruction for practicing structural engineers.



Ronald O. Hamburger, S.E., Senior Principal with Simpson Gumpertz & Heger, has nearly 45 years experience in structural design, construction, education and failure investigation. He is a past President of NCSEA, SEAOC, and SEAONC, past chair of SECB and current SEI Governor. He is internationally recognized for his work in failure investigation, building code and standards development, and performance-based design approaches. He served as a member of the select FEMA/ASCE panel that investigated the 9/11/2001 failures of New York's World Trade Center towers; and was co-Project Director for the FEMA/SAC project on welded steel moment frames.

A past chair of NCSEA's Code Advisory Committee, he currently chairs the ASCE 7 Standards Committee, is a member of the ASCE 41 Committee, the AISC Committee on Specifications, the Connection Prequalification Review Panel, and the BSSC Provisions Update Committee. He holds the ASCE Norman Medal and Walter P. Moore award, AISC's Higgins award, NCSEA's Delahay award, is a fellow of SEAOC, SEAONC and SEI and is a member of IStructE.

Ron has presented more than 200 lectures on diverse areas of structural engineering practice ranging from earthquake performance and resistance, to blast effects, progressive collapse and performance-based design. In 2015 he was elected to the National Academy of Engineering.

James Delahay Award

The award is presented at the recommendation of the NCSEA Code Advisory Committee to recognize outstanding individual contributions towards the development of building codes and standards. It is given in the spirit of its namesake, a person who made a long and lasting contribution to the code development process.



Jonathan (Jon) C. Siu, P.E., S.E., serves as the Principal Engineer/Building Official for the City of Seattle's Department of Construction and Inspections, a position he has held for the last 18 of the 34½ years he has been with the City. He has served on many national code and standard development committees since 1995, including several stints on ICC's IBC Structural and IEBC Committees. He also served on the ASCE 7-05 Seismic Subcommittee, and the Main Committee and General Requirements and Seismic Subcommittees for ASCE 7-10 and -16.

Jon has served as a director with the Seattle Chapter of the Structural Engineers Association of Washington and as president of the Washington Association of Building Officials. In his spare time, Jon teaches ATC-20 classes and is helping to organize a statewide disaster response program for volunteer engineers, architects, and building officials. Jon received his B.S and M.S. in engineering from UCLA.

13 Summit Scholarships Awarded to Young Members

NCSEA is excited to announce that a total of thirteen young engineers are being awarded scholarships to NCSEA's Structural Engineering Summit this year! Making the 2018 Scholarship program the largest since its start in 2013! Visit www.ncsea.com to view each of the recipients' essay answers.

Congratulations to the 2018 Scholarship Winners!



Jennifer Arrowood is a project engineer with Kirkpatrick Forest Curtis PC and is a member of the Oklahoma Structural Engineers Association.



Christopher Barlow is a structural engineer IA with CannonDesign and is a member of the Structural Engineers Association of Massachusetts.



Maher Eltarhoni is an engineer intern with 360 Engineering Group and is a member of the Oklahoma Structural Engineers Association.



Landon Harman is a project engineer II with Mackenzie and is a member of the Structural Engineers Association of Oregon.



Swarna Karuppiah is a graduate engineer with Datum Engineers, and is a member of the Structural Engineers Association of Texas.



Scott Kinney is an engineer with Walter P Moore and is a member of the Structural Engineers Association - Metro Washington.



Alicia Klaubert is a structural engineer with BVH Integrated Services and is a member of the Connecticut Structural Engineers Coalition.



Edward Major II is a structural engineer with Whitney Bailey Cox & Magnani, LLC, and is a member of the Structural Engineers Association of Pennsylvania.



Lena Raffin is a structural engineer with HGA and is a member of the Structural Engineers Association of Wisconsin.



Ted Saltz is an engineer with Thornton Tomasetti and is a member of the Structural Engineers Association of Massachusetts.



Christopher Smith is a structural engineer with Allen & Hoshall and is a member of the Tennessee Structural Engineers Association.



Lenard Tran is a structural design engineer at Patterson Engineering, and is a member of the Structural Engineers Association of California.



Hunter Wheeler is a graduate student at Kansas State University and is a member of the Structural Engineer's Association of Kansas and Missouri.



NCSEA thanks Computers & Structures, Inc. (CSi) for their sponsorship of this year's scholarship recipients.

Young Member Group of the Year Award

This award recognizes Young Member Groups that are providing a benefit to their young members, member organization, and communities. Each finalist group receives a complimentary registration to send a representative to the Summit, and the winning group will receive a cash prize. NCSEA thanks Computers & Structures, Inc. (CSi) for their sponsorship of this year's Young Member Group of the Year Award. The winning Young Member Group of the Year will be announced at the Young Engineer Reception on Wednesday evening.

Congratulations to the 2018 Young Member Group of the Year Finalists!

Structural Engineers Association of Massachusetts

Structural Engineers Association of New York

Structural Engineers Association of Utah

Structural Engineers Association of Washington

CONGRATULATIONS!

Buehler is proud of our team members and the national recognition for their contributions to the industry



Ryan Kersting, SE Robert Cornforth Award



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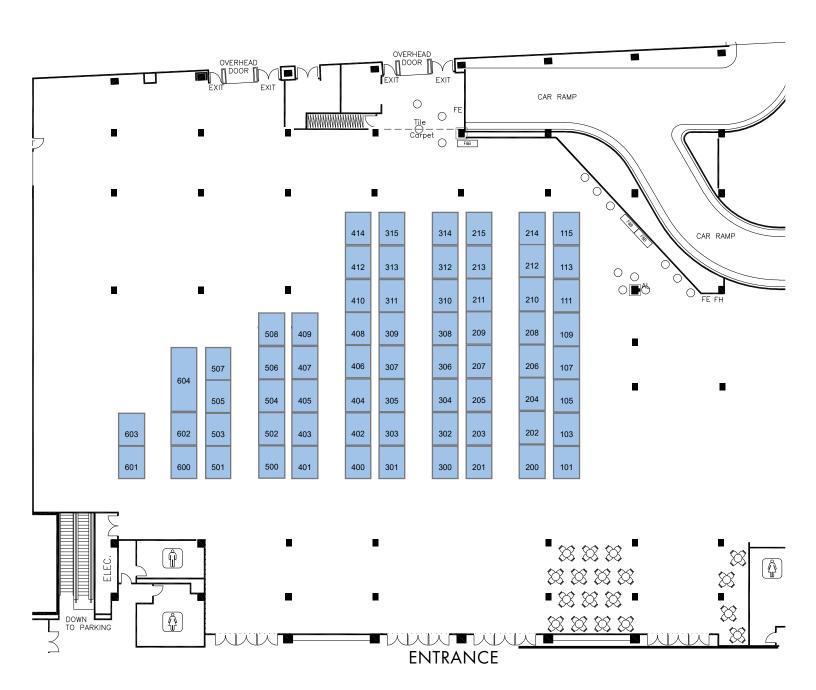


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308	American Welding Society	314	International Masonry Institute
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Winners will be drawn on Friday morning at 10:30 on the Trade Show Floor.

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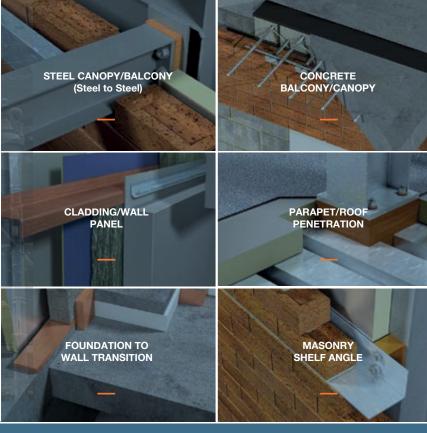
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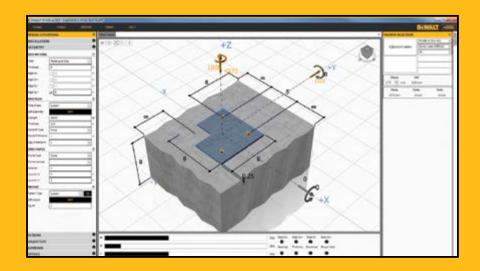
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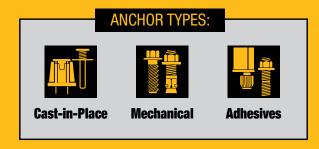


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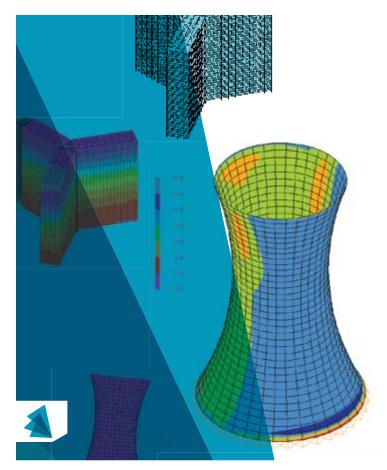
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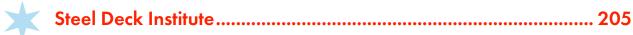


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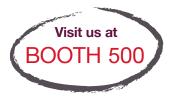
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