



# STRUCTURES CONGRESS 2020

St. Louis, MO | April 5–8

*STRUCTURAL ENGINEERING INSTITUTE OF ASCE*

## CLOSING PLENARY LUNCHEON and ASCE/SEI Awards Program

Wednesday, April 8, 2020 | 11:30 am – 1:45 pm  
St. Louis Union Station Hotel – Ballroom DEF

[www.asce.org/SEI](http://www.asce.org/SEI)

# SCHEDULE

11:30 am

## Welcome

**Laura E. Champion, P.E., M.ASCE,**  
*SEI Director*

12:25 pm

## Presentation of ASCE/SEI Awardees

**Glenn Bell, P.E., S.E., C.Eng., F. SEI, F.ASCE,**  
*SEI President*

**Jerome F. Hajjar, Ph.D., P.E., F.SEI, F.ASCE**  
*SEI Awards Committee Chair*

1:05 pm

## Keynote: Museum of the Future: Trends & Technologies Shaping the Future of Structural Engineering

**Christopher Wodzicki, P.E.,**  
*Engineering Services Director,*  
*Buro Happold Engineering*

&

**Michael Gustafson, P.E.,**  
*Business Strategy Manager,*  
*Autodesk*

1:30 pm

## Closing

**Joseph DiPompeo, P.E., F.SEI, F.ASCE,**  
*SEI President Elect*

## SHORTRIDGE HARDESTY AWARD

Given for contributing substantially in applying fundamental results of research to the solution of practical engineering problems in the field of structural stability.



This award is presented to **Ben Young, Ph.D., M.ASCE** for contributing substantially to the application of fundamental results of

research to solving practical structural stability problems in cold-formed and stainless steel structures. He has contributed significantly to the developments of design provisions in the North American Specification for the Design of Cold-Formed Steel Structural Members and in the ASCE Specification for the Design of Cold-Formed Steel Structural Members. Dr. Young has published many papers on structural engineering, including more than 50 in ASCE Journal of Structural Engineering. He also presented several keynote lectures on the topic of structural stability at various international conferences. He is widely known as a leading researcher in experimental structural stability and is a Co-Chief Editor for the Journal of Constructional Steel Research.

## JACK E. CERMAK MEDAL

Awarded for outstanding contributions to research and/or practice in wind engineering.



The 2020 award is presented to **Peter J. Vickery, Ph.D., P.E., F.SEI, F.ASCE** for his contributions in the development of hurricane

hazard models for risk analysis and for his major impact on the development of building codes and standards in North America. He has led the team at Applied

Research Associates Inc. that has provided the wind speed contours in the ASCE 7 Standard along the hurricane coastlines of the USA since 2005. He has been a long-time member of the Wind Committee of ASCE 7 where his broad knowledge of wind engineering, combined with his expertise in probability and structural reliability, has been invaluable in the development of improved provisions for wind loading.

## MOISSEIFF AWARD

Given to the authors of a published paper that makes a significant contribution in the field of structural design.



**Tsukasa Mizutani, Tomonori Nagayama, Ph.D., A.M.ASCE, Tomoaki Takeda, Ph.D., Yozo Fujino, Ph.D., M.ASCE**

For their paper: "Reproduction of Cable-Stayed Bridge Seismic Responses Involving Tower— Girder Pounding and Damage Process Estimation for Large Earthquakes" because of its strong reviewer recommendations and novelty of the work. In this paper, the authors investigate tower-girder transverse pounding observed on the Yokohama Bay Bridge wind tongue during the 2011 Great East Japan Earthquake. The paper investigates the tower-girder pounding during earthquake using a multi-scale model combining the global frame model and the local FE model, which no one has studied before and makes a significant contribution to seismic design and analysis of cable stayed bridges at risk of seismic pounding.

## NATHAN M. NEWMARK MEDAL

Given for contributions in structural mechanics and helped substantially to

strengthen the scientific base of structural engineering in the form of papers or other written presentations.



This award is presented to **Satish Nagarajaiah, Ph.D., F.SEI., F.ASCE** for the development of nonlinear dynamic analysis

techniques for base-isolated structures, development of adaptive stiffness systems, negative stiffness systems, smart tuned mass dampers, and for sparse structural system identification techniques, and laser-based non-contact strain sensing using nanomaterials.

## **RAYMOND C. REESE RESEARCH PRIZE**

Given to the authors of a published paper that makes an outstanding contribution to the application of structural engineering research.



**Dan Mircea Frangopol, P.E., F.SEI, Dist.M.ASCE, Yan Liu, Ph.D., A.M.ASCE**

For their paper: "Utility and Information Analysis for Optimum Inspection of Fatigue-Sensitive Structures". This paper makes a significant contribution to the design of an optimum decision-making framework that schedules future structural inspections on the basis of achieving maximum information utility to decision makers. In the nominated paper, the authors adopt the utility concept applied to inspection information for decision-making purposes in order to achieve the best-informed decision.

## **2019 JACK E. CERMAK MEDAL**

Awarded for outstanding contributions to research and/or practice in wind engineering.



The 2019 award is presented to **Kenny Kwok, Ph.D., CPEng, M.ASCE** for making a continuous contribution over the last

40 years to the study and practice of wind engineering, primarily in the fields of wind-induced structural dynamics, vibration control, full-scale measurements of building responses and occupant response to building motion. His innovative work using building motion simulators to understand the psychological and neuro-physiological response of building occupants is a perfect example of the cross-disciplinary, out-of-the-box thinking that has allowed him to innovate for such an extended period of time.

## **2019 RICHARD R. TORRENS AWARD**

The Richard R. Torrens award honors a volunteer Journal editor who makes outstanding contributions to the ASCE publications program. The editor is often responsible for significant improvement in the quality and stature of the publication or an increase in the publication's size and/or frequency.



This award is presented to **Anil Agrawal, P.E., Ph.D., M.ASCE**. He is currently a Herbert G. Kayser Professor of Structural/Bridge

Engineering at the City College of New York and the Chief Editor of the ASCE Journal of Bridge Engineering. Dr. Agrawal has published more than 250 articles, including more than 100 peer review journal articles and more than 20 reports.

## SEI GRADUATE STUDENT CHAPTER OF THE YEAR AWARD

Recognizes exemplary activities and efforts to advance and serve the structural engineering profession. SEI encourages graduate students to establish local SEI Graduate Student Chapters (GSCs) to enhance the education of students preparing to become structural engineers and engage student members in SEI for a successful transition from college to career.



*SEI Graduate Student Chapter (GSC) at Northeastern University, Massachusetts*

The award goes to the **SEI Graduate Student Chapter (GSC) at Northeastern University, Massachusetts**, its officers, and members are commended for their dedication in creating activities, such as the seminar series and documentary night, to keep your members engaged and active. This group has displayed an excellent mix of technical and social activities that relate well to the students and help them transition into the work force including a full website developed to promote the chapter.

## SEI CHAPTER OF THE YEAR AWARD

Recognizes outstanding achievement and efforts by local SEI Chapters to advance and serve the structural engineering profession.



*SEI Houston Chapter*

The award goes to the **SEI Houston Chapter** for their efforts in advancing the structural engineering profession by staying active and engaging their members. Their 11 technical sessions that included well-diverse structural engineering topics to bring different backgrounds within the community are notable. Having practical industrial technical sessions not only improved the structural engineering community technical knowledge but also brought their community together for the opportunity to network.



## W. GENE CORLEY AWARD

Recognition for efforts in advancing and distinguishing structural engineering as a profession, especially licensure for structural engineers.



The award is presented to **Randall P Bernhardt, P.E., S.E., F.SEI, F.ASCE** for being a tireless advocate for SE licensure. As Chair of the

Structural Engineering Institute Professional Activities Committee, and now Chair of the Structural Engineering

Licensure Coalition, he has spearheaded the effort to create a national consensus document that defines Significant Structures, the type or class of structures that should be designed by licensed structural engineers. With this document, structural engineers will find it easier to communicate the need and value of structural engineering licensure to engineering board members and board administrators. While this document was the work of many, many people, it was his hard work and persistence that brought it to life.

## WALTER P. MOORE, JR. AWARD

Recognizes a structural engineer who has demonstrated technical expertise in and dedication to the development of structural codes and standards.



The award is presented to **Charles A. Kircher, Ph.D., S.E., M.ASCE** for his more than three decades of involvement and

leadership in the development of seismic design requirements incorporated in ASCE/SEI 7 and the NEHRP Provisions, seismic related guidelines produced by FEMA

and ATC, methods to estimate earthquake losses incorporated in the HAZUS Loss Estimation Technology and Software, and design requirements for seismic isolation technologies incorporated in ASCE 7 and the NEHRP Provisions. He has been a key member of the ASCE 7/SEI Seismic Subcommittee Task Committee since 2000 and has provided important contributions in the areas of seismic design ground motions and requirements for structures utilizing seismic isolation and damping systems. His in-depth technical understanding of ground motion and seismic engineering issues also contributed greatly to the successful development of the seismic areas of ASCE/SEI 7.

## DENNIS L. TEWKSBURY AWARD

Recognizes an SEI member for outstanding professional leadership in and service to the Structural Engineering Institute of ASCE.



The award is presented to **Donald Dusenberry P.E., SECB, F. SEI, F. ASCE** for advancing the interests of SEI through impactful

leadership; promoting the growth and visibility of SEI; establishing working relationships between SEI and other structural engineering organizations; advocating for structural engineering licensure, SEI global expansion, and performance base design; and has deeply impacted to the structural engineering profession.

# STRUCTURAL ENGINEERING INSTITUTE AWARDS

## SEI PRESIDENT'S AWARD

Given at the discretion of the SEI President and recognizes an SEI member who has made exemplary contributions to the success of the Institute.



This award is presented to **David Winbern Cocke, S.E., F.SEI, F.ASCE**, for advancing the future vision of structural engineers and structural engineering. In his terms on the SEI Board and as SEI President, David worked

tirelessly to update SEI's Vision document, foster a collaborative relationship amongst SEI, NCSEA, and CASE, and create a Joint Vision and implementation plan that is being pursued by the three organizations. The Joint Vision promises to propel structural engineering forward through the coordinated and combined efforts of the entire structural engineering community.

**Nominate a colleague for 2021 SEI/ASCE Awards at [www.asce.org/SEI](http://www.asce.org/SEI)**

## CONGRATULATIONS TO 2020 SEI FELLOWS

The SEI Fellow (F.SEI) grade distinguishes members as leaders and mentors in the profession.

**Thomas Broz** P.E., S.E., F.SEI,  
F.ASCE

**Peter Chase** P.E., F.SEI, M.ASCE

**Karen Chou** Ph.D., P.E., F.SEI,  
F.ASCE

**Benton Cook III** P.E., S.E., F.SEI,  
M.ASCE

**Chung Fu** Ph.D., P.E., F.SEI,  
F.ASCE

**Guy Lund** P.E., F.SEI, M.ASCE

**Adolfo Matamoros** Ph.D., P.E.,  
F.SEI, M.ASCE

**Jamie Padgett** Ph.D, F.SEI,  
A.M.ASCE

**Keith Porter** Ph.D., P.E., F.SEI,  
M.ASCE

**Hayder Rasheed** Ph.D., P.E.,  
F.SEI, F.ASCE

**Karl J. Rubenacker** P.E., S.E.,  
F.SEI, M.ASCE

**Benjamin Schafer** Ph.D., P.E.,  
F.SEI, M.ASCE

**Shuxian Wassenius** P.E., F.SEI,  
M.ASCE



# Futures Fund

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# CONGRATULATIONS TO RECIPIENTS OF SEI FUTURES FUND SCHOLARSHIPS TO PARTICIPATE AT STRUCTURES CONGRESS

## Students Scholarship

**Dayakar Naik Lavadiya**,  
S.M.ASCE, North Dakota State  
University

**Min Li**, S.M.ASCE,  
Colorado State University

**Jessica Lopez**, S.M.ASCE,  
University of Illinois at Chicago

**Maria Camila Lopez Ruiz**,  
S.M.ASCE, University of California,  
Berkeley

**Daniela Lugo Romero**, S.M.ASCE,  
Princeton University

**Nicholas Maloney**, S.M.ASCE,  
Drexel University

**Erin Mills**, S.M.ASCE,  
Kansas State University

**Jordan Nutter**, S.M.ASCE,  
University of Kansas

**Ryan Olsen**, S.M.ASCE,  
Michigan Technological University

**Hongrak Pak**, S.M.ASCE,  
Texas A&M University

**Sarah Puchner**, S.M.ASCE,  
The University of Alabama in  
Huntsville

**Selene Renes**, S.M.ASCE,  
South Dakota State University

**Paul Ryan**, S.M.ASCE,  
Florida Institute of Technology

**Babak Salarieh**, S.M.ASCE,  
University of Alabama in Huntsville

**Stefanie Schulze**, S.M.ASCE,  
Oregon State University

**Niyam Shah**, S.M.ASCE,  
New Jersey Institute of Technology

**Jay Shah**, S.M.ASCE,  
Texas A&M University, College  
Station

**Missagh Shamshiri**, S.M.ASCE,  
University of Texas at Arlington

**Samuel Steiner**, S.M.ASCE,  
Bradley University

**Muhammad Salman Tahir**,  
S.M.ASCE, National University  
of Sciences and Technology,  
Islamabad, Pakistan

**Luke Timber**, S.M.ASCE,  
The University of Delaware

**Shree Tripathi**, S.M.ASCE,  
Southern Illinois University Carbondale

**Xuguang Wang**, S.M.ASCE,  
University of Toronto, Canada

**Haifeng Wang**, S.M.ASCE,  
University at Buffalo

## Young Professional Teaching Faculty

**Mohamad Alipour**, Ph.D.,  
A.M.ASCE, University of Virginia

**Mohammad Omar Amini**, Ph.D.,  
EIT, A.M.ASCE, Colorado State  
University

**William Collins**, Ph.D., P.E.,  
M.ASCE, University of Kansas

**Mohamed Elhassan**, Aff.M.ASCE,  
University of Khartoum, Sudan

**Laura Micheli**, Ph.D., EIT,  
A.M.ASCE, Catholic University of  
America

**Ravi Yellavajjala**, Ph.D., P.E.,  
M.ASCE, North Dakota State  
University

## Young Professionals

**Stefanie Rae Arizabal**, P.E.,  
M.ASCE, San Francisco, CA

**Dan Bergsagel**, C.Eng, M.ASCE,  
Brooklyn, NY

**Christopher Bird**, EIT, A.M.ASCE,  
Washington, DC

**Jillian Cayer**, EIT, A.M.ASCE,  
New York, NY

**Halle Doenitz**, P.E., M.ASCE,  
Playa del Rey, CA

**Megan Hanrahan**, EIT,  
A.M.ASCE, Los Angeles, CA

**Nicholas Heim**, EI, A.M.ASCE,  
Cleveland, OH

**Hannah Hillegas**, P.E., M.ASCE,  
Kansas City, MO

**Jayne Jhaveri**, P.E., M.ASCE,  
Dallas, TX

**Bishal Khadka**, EIT, A.M.ASCE,  
Washington, DC

**Daniel Koothoor**, EIT, A.M.ASCE,  
Sunnyvale, CA

**Maissoun Ksara**, A.M.ASCE,  
Philadelphia, PA

**Katherine O'Neill**, EIT, A.M.ASCE,  
Sarasota, FL

**Matthew Powell**, S.E.,  
Aff.M.ASCE, Leeds, UK

**Rebecca Reifel**, A.M.ASCE, St.  
Louis, MO

**Matthew Shelden**, EIT, A.M.ASCE,  
Petaluma, CA

**Margaret Stambaugh**, P.E.,  
M.ASCE, St. Louis, MO

**Ashfaq Syed**, P.E., A.M.ASCE,  
Dallas, TX

## 2019 O.H. Ammann Research Fellowship Recipients

**Mirela Tumbeva**, S.M.ASCE, University of Notre Dame

**Christopher Michael Zaverdas**, S.M.ASCE, Rensselaer Polytechnic Institute

**Fei Ding**, P.E., A.M.ASCE, University of Notre Dame

**Ran Cao**, S. M.ASCE, The City College of New York

**Sina Basereh**, S.M.ASCE, University of Buffalo

## In recognition of distinguished service and leadership on the SEI Board of Governors:

**Sivaji Senapathi**, P.E., F.SEI, F.ASCE., 2015-2019, board member  
representing Local Activities Division

**Satish Nagarajaiah**, Ph.D., F.SEI, F.ASCE., 2015-2019, board member  
representing Technical Activities Division

**Cheng Lok Caleb Hing**, Ph.D., P.E., F.SEI, F.ASCE., 2014-2017, board member  
representing Local Activities Division, 2017 SEI President Elect, 2018 SEI  
President, 2019 SEI Past President, Chair 2018

## In recognition of distinguished service to and leadership on the SEI Futures Fund Board:

**Glenn R Bell**, P.E., S.E., C.Eng, F.SEI, F.ASCE., 2014-2019, Chair 2019

# SAVE THE DATE

## Structures Congress 2021

Seattle, Washington | March 10-13, 2021



► Abstract and Session Proposals Due June 3, 2020

## Electrical Transmission & Substation Structures Conference

Orlando, Florida | September 19-23, 2021



► Call for Abstracts Opens April 29, 2020

## Structures Congress 2022

Atlanta, Georgia | April 21-23, 2022

## Structures Congress 2023

New Orleans, Louisiana | May 4-6, 2023



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A special Thank You for hosting the Special Evening Reception:  
Celebrating the Future of Structural Engineering



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