

To TORONTO

BY TASHA WEISS

Canada's largest city is set to host this year's NASCC: The Steel Conference.

FOR THE FIRST TIME in nearly a decade, NASCC: The Steel Conference is heading north of the border.

This year's show will take place in Toronto, March 26-28, at the Metro Toronto Convention Centre; Montreal hosted The Steel Conference in 2005.

Each year, NASCC puts the latest in structural steel design and construction on display, and last year's show in St. Louis was the largest one yet, boasting an all-time record of 3,748 attendees. The Toronto show promises massive educational and networking offerings, with more than 100 technical sessions. The exhibit hall will be filled with 200 companies featuring cutting-edge technologies and products, ranging from the latest structural software to state-of-the-art fabrication equipment. The show also incorporates a special new series of seismic sessions, Northridge—20 Years Later, as well as the World Steel Bridge Symposium (WSBS), the Technology in Steel Construction Conference (TSCC) and the Structural Stability Research Council's Annual Stability Conference (SSRC).

Attendees will learn about the new direct analysis method and the *Code of Standard Practice*, as well as explore the practical aspects of designing for torsion and what really matters in weld inspection. Some sessions are aimed at engineers while others are of greater interest to fabricators and others in the steel supply chain. However, all attendees are welcome to attend any session.

A complete list of sessions is provided in the 2014 Advance Program, available online at www.aisc.org/nascc.

Seismic Sessions

Twenty years ago the Northridge Earthquake shook California, and the results surprised designers throughout the U.S. AISC will present a special series of sessions, Northridge—20 Years Later,

at The Steel Conference examining the lessons learned from the earthquake and the latest developments in seismic design. The special sessions kick off on Wednesday with presentations on what happened in Northridge and the subsequent development of the SAC Steel Project (an initiative formed to investigate the damage to welded steel moment frame buildings and develop repair techniques and new design approaches to minimize damage in future earthquakes). The presentations in this series include:

- The SAC Steel Project
Steve Mabin, University of California-Berkeley
- The Moment Connection Details We Left Behind (and Why)
Mike Engelhardt, University of Texas at Austin
- The Changes to Design Practice
Tom Sabol, Englekirk and Sabol
- Revisiting W1a Indications
Duane Miller, The Lincoln Electric Company
- The Changes that Resulted in Fabrication and Erection
Robert Hazleton, The Herrick Corporation
- Japan's Experience in Kobe
Masayoshi Nakashima, Kyoto University
- The Changes that Resulted in Research
Chia-Ming Uang, University of California at San Diego
- AISC 341 Then and Now
Jim Malley, Degenkolb Associates
- AISC 358: Prequalified Moment Connections
Ron Hamburger, Simpson, Gumpertz & Heger
- Changes in Materials and Inspection
Tom Schlafly, AISC
- Column Base and Splice Details
Amit Kanvinde, University of California, Davis
- Conventional Braced Frames
Charles Roeder, University of Washington
- Buckling-Restrained Braced Frames
Rafael Sabelli, Walter P Moore
- Shear Walls
Michel Bruneau, State University of New York at Buffalo
- Systems that Mix Steel and Concrete (Beyond Composite Design)
Jerry Hajjar, Northeastern University
- System Reliability
Greg Deierlein, Stanford University
- ASCE 41
John Hooper, Magnusson Klemencic Associates



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Building Bridges

Held every other year in conjunction with The Steel Conference, the World Steel Bridge Symposium (WSBS) brings together bridge design engineers, construction professionals, academics, transportation officials, fabricators, erectors and constructors to discuss and learn state-of-the-art practices for enhancing steel bridge design, fabrication and construction techniques.

“The National Steel Bridge Alliance (NSBA) is very excited to colocate WSBS with The Steel Conference in Toronto,” said Brian Raff, NSBA’s marketing director. “This year’s Symposium features the greatest number of presentations in its history—more than 50 specialized sessions on all aspects of steel bridge design and construction. It also marks the greatest number of international presentations, truly highlighting the ‘World’ in the World Steel Bridge Symposium.”

You’ll find sessions on coatings, accelerated construction technologies and prefabricated bridge elements and systems, as well as others that focus on steel’s long life, low maintenance cost, quick erection and environmentally sound attributes. The three days of sessions are co-sponsored by the International Association for Bridge and Structural Engineering. View all WSBS sessions and learn more about exhibiting opportunities at www.steelbridges.org/wsbs.

Talking Technology

For the third year in a row, NASCC will deliver a glimpse into the future of technology in the steel construction industry with the TSCC. This special track features nine sessions that focus on advanced technology use throughout the steel construction industry.

Opening the TSCC are two Wednesday afternoon sessions: “BIMsteel: AISC’s Interoperability Initiatives for the Structural Steel Industry” and “Structural Engineers and AISC: Removing the Reasons Why not to Share the BIM.” The former will explore AISC’s current BIMsteel initiatives for the industry, including automating steel fabrication, progress in material procurement, developing robust data exchanges between structural engineers and detailers and moving to a model-based review

process. The latter examines the structural engineer’s pivotal role in the digital delivery of steel buildings and how AISC can support them in the BIM-enabled process.

The remaining TSCC sessions on Thursday and Friday will range from “BIM, A Cost vs. Benefit Study for the Detailer and Fabricator” to “Beyond Drawings: How the Evolution of BIM will Integrate Models and Shape the Future of the Review Process” and “Expanded Use of Laser Scanning Structural Steel.”

From Classrooms to Careers

Speaking of those at the forefront of using progressive technology, dozens of college students are expected to join the conference for the fourth annual Students Connecting with Industry Sessions (SCIS).

The half-day program, sponsored by the AISC Education Foundation and organized in cooperation with SE Solutions, will begin with a Thursday morning expert-led session about the role of the engineer in project design and making the transition from student to practicing engineer.

“The Steel Conference epitomizes the vibrancy of the steel construction industry with its mix of designers, contractors, producers and academics,” said Nancy Gavlin, AISC’s director of education. “Our programs make students an integral part of the experience. With the assistance of SCIS, students moderate sessions, have one-on-one interaction with leaders in the steel construction industry, explore



Scoping Out Sculptures

SteelDay 2013 not only gathered more than 10,000 people nationwide to learn about the structural steel industry, but also encouraged participation from AISC full and associate members to show what they can do creatively with steel.

Fourteen sculptures were entered into this year’s SteelDay Sculpture Competition for a chance to be one of five finalists to have their creation on display at The Steel Conference in Toronto. There, the ultimate winner will be chosen by attendees! The finalists were chosen via AISC’s Facebook page where fans were able to view photos of the sculptures and vote for their favorites. The top five finalists headed to Toronto are:

- Memories of Steel
- Lunch Atop a Skyscraper
- Get a Grip
- Reflecting the High Way
- Steve the Robot

You can view photos all of this year’s entrants, including the finalists, at SteelDay’s Facebook page at www.facebook.com/AISCdotORG (in the “Steel Sculpture Competition Voting 2013” photo album).



▲ Last year’s SteelDay Sculpture Competition winner: “Steel Life-Cycle” by Bruce Helmreich of Michelmann Steel Company.

the exhibit hall, attend lectures and participate in social events. This year we are very happy that the Canadian Institute of Steel Construction will be joining AISC in sponsoring student participation in the conference.”

The program will continue with a tour of the exhibit hall and conclude with the “Direct Connect Student Career and Mentoring Session,” which is an opportunity for students to converse one-on-one with industry experts and representatives from more than 30 companies. “SICS provided me a great platform to develop my network,” commented one student from last year’s program. Another praised the program for “developing experiences that are impossible to obtain from just being in the classroom.”

Students who are AISC members (membership is available for free to qualified students) receive free admission to The Steel Conference, including the SCIS program.

Back to School

Those who have been in the working world for a while are also able to learn something new, whether it’s a highly technical issue or a business-related strategy.

This year’s keynote speaker is Neil Pasricha, author of *The Book of Awesome*, a #1 international bestseller. His lecture, “1,000 Awesome Things,” will touch upon his project of posting one awesome thing every weekday for 1,000 consecutive weekdays—and he’ll teach you how to bring awesome principles to life in your organization.

Another, more technically oriented presentation, the T.R. Higgins Award Lecture, “Statics, Strength, Ductility, and the

Uniform Force Method,” will be presented by Larry S. Muir.

Muir is the 2014 recipient of AISC’s T.R. Higgins Award for his paper “Designing Compact Gussets with the Uniform Force Method,” published in the first quarter 2008 issue of AISC’s *Engineering Journal*. Muir recently became AISC’s director of technical assistance.

“I am so very pleased that Larry is the recipient of the Higgins Award,” said Charlie Carter, AISC’s vice president and chief structural engineer. “His paper is very meaningful; it simplifies gusset design by the uniform force method and allows the use of even more compact gusset plates than the original method. Larry is a very accomplished and deserving recipient.”

Registration Tips

The registration fee as of February 1 is \$400, but be sure to register as early as possible; the rate increases \$10 every week until the conference opens.

This single registration fee gains you entry to all technical sessions, the exhibition hall, the keynote address and the T.R. Higgins Award Lecture. It also includes admission to all Structural Stability Research Council, Technology in Steel Construction Conference and World Steel Bridge Symposium sessions. The main conference offers up to 18.5 PDHs; attendees of short courses can earn an additional 4 PDHs for a total of 22.5 PDHs. Visit www.aisc.org/nascc to register or view the advance program.

See you in Toronto (and don’t forget your passport)! ■