

IN MEMORIAM

**Le-Wu Lu, Renowned Civil Engineer Researcher, Dies**

Le-Wu Lu, who gained international renown for his research into the strength and behavior of building structures during a Lehigh University career that spanned six decades, died in July at the age of 81.

Throughout his research and teaching career, Lu's expertise helped expand Lehigh's global reputation for structural engineering. He is best known for his extensive studies on the seismic response of steel building structures, precast concrete structures, innovative structural systems, composite steel-concrete structures, structural connections and the repair and retrofit of structures.

He received several major awards, published more than 250 journal articles and conference papers and supervised or co-supervised two dozen Ph.D. students during his academic career. He also served as chair of Lehigh's department of civil and environmental engineering.

Research by Lu and his Lehigh colleagues has been cited thousands of times, according to Google Scholar, and continues to inform codes and specifications, design recommendations and the work of practicing engineers and professional organizations, including AISC.

He was actively involved in numerous professional societies including the American Society of Civil Engineers, the Earthquake Engineering Research Institute, the International Association for Structural Safety and Reliability and the original Joint Committee on Tall Buildings, which later became the Council on Tall Buildings and Urban Habitat.

Lu is survived by his wife, Dorothy Lu; a daughter, Julia; a son, Paul; and one grandchild.



STEELXML

**steelXML Moves Into Beta Testing**

AISC member FabSuite, LLC, has released the steelXML schema (allowing for a fully electronic RFQ exchange) for public beta testing. Once successfully tested on a limited basis, the schema will be fully implemented and made available to all FabSuite clients. This represents a major milestone in the development of the first real-world application of e-commerce in the structural steel industry.

"AISC's steelXML initiative will improve the way steel is quoted, purchased, delivered and managed," commented Luke

Faulkner, AISC's director of IT initiatives.

The steelXML schema has been developed by AISC with a working group consisting software vendors, service centers, producers and fabricators.

The project aims to provide a standard file format that every MIS software, modeling software and material management software package (at buyer or supplier ends) can easily implement to streamline the complete process of material procurement and management.

To learn more about steelXML, visit [www.aisc.org/steelxml](http://www.aisc.org/steelxml).

**People and Firms**

- **Simpson Strong-Tie**, a supplier of engineered structural connectors and building products, offers a new Steel Deck Diaphragm Calculator ([www.strongtie.com/SDDC](http://www.strongtie.com/SDDC)) web app that enables engineers to design and evaluate fastener solutions for steel decks with given shear and uplift loads.

- The Steel Bridge Task Force of the **Steel Market Development Institute (SMDI)**, a business unit of the **American Iron and Steel Institute (AISI)**, and **AASHTO (American Association of State and Highway Transportation Officials)** Technical Committee for Structural Steel Design have named **Alexander D. Wilson**, manager of customer technical services for ArcelorMittal USA, as the recipient of the 2014 Richard S. Fountain Award.

- **ZweigWhite** has named AISC Member **SidePlate** as one of the 2014 "Best Firms to Work For." Based on criteria including job satisfaction, development opportunities, benefits and overall corporate culture, SidePlate ranked No. 4 nationwide in the Structural Engineering category. The full list of winners, which includes several firms that have contributed to Modern Steel, is at [www.zweigwhite.com](http://www.zweigwhite.com).

## IN MEMORIAM

**Structural Engineering Community Mourns the Loss of Dan Cuoco**

Engineers around the world are mourning the loss of Dan Cuoco, former president and CEO of international engineering firm Thornton Tomasetti. He passed away in September at the age of 68.

“Dan was a brilliant engineer and leader who made tremendous contributions to our firm’s growth as well as to the built environment around the world,” said chairman and CEO Thomas Z. Scarangelo, P.E., who succeeded Cuoco as the firm’s CEO in 2011. “In his four decades with Thornton Tomasetti, Dan established new offices, launched innovative ventures and helped us build preeminent structural engineering and investigation practices.”

Cuoco worked on some remarkable projects during his time at Thornton Tomasetti, including the firm’s first high-rise building—the steel-framed One Tampa City Center in Florida—and numerous landmarks throughout the U.S.

“Dan was a savvy engineer and his contributions to the profession in his involvement in structural standards development will be missed,” said

Charlie Carter, AISC vice president and chief structural engineer.

Building collapse investigations became another specialty of Cuoco’s, and he helped lead the rescue/recovery operations during the L’Ambiance Plaza Building collapse in Bridgeport, Conn. in 1987. But it was the World Trade Center collapse on September 11, 2001 that Cuoco, on his retirement in 2011, identified as his most important project.

He led a team of Thornton Tomasetti executives and engineers who immediately responded to the scene after the collapse to oversee rescue efforts and clean-up operations in the unstable debris field. “It was challenging not only from a technical standpoint, but also an emotional one,” he would recall. “It wasn’t easy maintaining my composure and objectivity when making decisions on the job site 16 hours a day. I saved the emotional unraveling for when I was alone in my car driving to and from the site.”

Throughout his career, Cuoco served as a mentor to young engineers. He also helped establish Thornton

Tomasetti as a world leader in structural design and an early adopter of emerging technologies such as building information modeling (BIM).

“Dan was a leader in times of prosperity and challenge,” added Scarangelo. “His contributions to our firm and the engineering profession are too many to list, but will be celebrated and remembered forever. Our hearts go out to his wife, Dianne, his children and grandchildren, who were his greatest joy. Dan’s memory will inspire us to achieve great things.”



## NSBA

**NSBA Issues Guidance on Fit of Skewed and Curved Steel Girder Bridges**

A new free document, *Skewed and Curved Steel I-Girder Bridge Fit*, developed by the NSBA Technical Subcommittee, provides designers with guidance on determining the appropriate fit for skewed and

curved steel I-girder bridges.

“Fit decisions are made on every steel bridge, and sometimes this decision has a significant impact on constructability or loads,” said Ronnie

Medlock, P.E., vice president of technical services at High Steel Structures in Lancaster, Penn. (an AISC/NSBA Member and AISC Certified fabricator) and head of the NSBA Technical Subcommittee. “The summary raises awareness about the importance of fit, describes how fit comes to play in I-girder bridge construction and provides guidance on how to handle fit, especially for skewed

and curved I-girder bridges.”

As roadway alignments and interchanges become more complex, steel girders are the preferred solution for skewed and curved bridges required to accommodate the roadway. However, the design and detailing of these bridges must recognize and allow for change of shape of the steel girders, as dead load is incrementally applied during the process of construction.

The document discusses the issue and offers recommendations to ensure a trouble-free project. It includes information on the effects of twisting girders as well as how to detail cross-bracing and diaphragms when differential deflection is present in the I-girders.

The document is available at [www.steelbridges.org/bridgfit](http://www.steelbridges.org/bridgfit).



SCHOLARSHIPS

Annual AISC Scholarship Winners Announced

For the third straight year, the AISC Education Foundation offered two scholarship programs for university-level students. This year, AISC has administered a total of \$153,500 in financial aid to 45 deserving freshmen, sophomores, juniors, seniors and masters students for the 2014-15 academic year.

The David B. Ratterman Fast Start Scholarship program for freshmen and sophomores, now in its third year, awarded 11 scholarships to students at two-year and four-year colleges. These students, who must be relatives of AISC Member company employees, are full-time freshmen or sophomores during the 2014-15 academic year.

In addition, the AISC Education Foundation, in conjunction with several other structural steel industry associations, awarded \$113,500 in general scholarships to 34 sophomores, juniors, seniors and masters students for the 2014-15 academic year. The winners of both programs are as follows:

David B. Ratterman  
Fast Start Scholarships

Winners Attending 2-Year Schools

- Mark Jones, Cayuga Community College
- Brittany Kemp, Florida Gateway College
- Nathaniel Krafft (*not pictured*), Ivy Tech Community College
- Darby Thompson, North Florida Community College
- John Unger, Blue Ridge Community College

Winners Attending 4-Year Schools

- Matthew Dominguez, Berry College
- Jackson Herron, University of British Columbia
- Joshua Howell, Virginia Polytechnic Institute & State University
- Greta Lewis, University of Minnesota - Twin Cities
- Keaton Lewis, University of Nebraska Lincoln
- Josiah Schaffer, University of Rhode Island

AISC Scholarships for Juniors, Seniors and Masters-Level Students  
AISC Education Foundation

- Kayla Arruda, Northeastern University
- Corey Aumiller, University of Illinois at Urbana-Champaign
- Nicholas Brandis, Northwestern University
- Thomas Dacanay, Virginia Tech
- Jennifer Kearney, Pennsylvania State University
- Alexander Lakocy, Georgia Institute of Technology
- Luke Livers, University of Illinois at Urbana-Champaign
- Erik McAdams, Stanford University
- Mara Minner, University of California, Berkeley
- Greg Phattanachitchon, State University of New York at Buffalo
- Andrew Salber, University of California, Berkeley



Jones



Kemp



Thompson



Unger



Dominguez



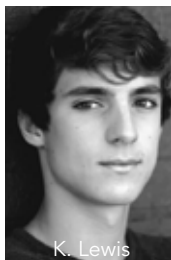
Herron



Howell



G. Lewis



K. Lewis



Schaffer



Arruda



Aumiller



Brandis



Dacanay



Kearney



Lakocy



Livers



McAdams



Minner



Phattanachitchon



Salber



- Donald Shaw, University of Southern Indiana
- Andrew Sonta, Northwestern University
- Jakob Sumearll, University of Wyoming
- Tyler Thorson, Iowa State University
- Jennifer Tovar, Brigham Young University
- Karen Wang, Northwestern University
- Matthew Watters, University of Arkansas
- Ryan Whelchel, Kansas State University

**AISC/Ohio Structural Steel Association**

- Abigail Ping, University of Cincinnati

**AISC/Rocky Mountain Steel Construction Association**

- Jakob Sumearll, University of Wyoming

**AISC/Southern Association of Steel Fabricators**

- Anthony Hendren, University of Kentucky
- Alexander Lakocy, Georgia Institute of Technology

**AISC/Associated Steel Erectors of Chicago**

- Nicholas Brandis, Northwestern University
- Sara Ibarra, Northwestern University
- Jingyu Lee, University of Illinois at Urbana-Champaign
- Andrew Sonta, Northwestern University
- Heather Todak, Purdue University

**AISC/Indiana Fabricators Association**

- Sijun He, Rose-Hulman Institute of Technology
- Ethan Hess, Indiana University-Purdue University Fort Wayne
- Allison Rotella, University of Notre Dame
- Steve Warner, Valparaiso University

**AISC/W&W Steel/ Oklahoma State University**

*(Program includes sophomores, juniors and seniors)*

- Bri Friedman, Civil Engineering
- Matthew Mestre, Civil Engineering
- Kaylee Roper, Architectural Engineering
- Benjamin Schwarz, Architectural Engineering
- Charles Spencer Nokes, Construction Management
- Preston Williams, Construction Management

**The AISC Scholarship jury consisted of the following six individuals:**

- Benjamin Baer, Baer Associates Engineers, Ltd.
- David Bibbs, Cannon Design
- Christopher Brown, Skidmore Owings and Merrill, LLP
- Erin Criste, AISC
- Colleen Malone, H.W. Lochner, Inc.
- Carol Post, Thornton Tomasetti

STEELDAY

## Sixth Annual SteelDay Showcases U.S. Structural Steel Industry

Thousands of people attended dozens of free events around the country on September 19 in celebration of the structural steel industry's sixth annual SteelDay, hosted by AISC and its members and partners. AEC professionals, university students and the public took the day to see the industry at work and learn about the latest advancements in steel design and construction by visiting structural steel facilities, touring job sites, attending educational presentations and joining networking events.

"It was another successful SteelDay," commented Ross Allbritton, AISC's industry mobilization manager. "This year featured more building project site tours than ever before, offering guests the opportunity to see current steel projects up close. We can't wait to see you again and bring more opportunities in 2015!"

And across the country, steel fabricators, erectors, mills, galvanizers and others opened their doors for guests to get an inside look at various facets of the industry.

"I learned more about the process of building structures and found it very exciting to also attend a crane demonstration," said Greg Adams, a structural engineering and mechanics graduate student at North Carolina State University and part-time civil design engineer

at Shearon Harris Nuclear Plant in New Hill, N.C. He was a winner in AISC's SteelDay Twitter contest and attended a SteelDay event at Buckner Companies in Graham, N.C.

"There were also more than 200 high school students there who learned about all the different trades involved in constructing steel structures, including fabricators, riggers, ironworkers, crane operators and welders," he said. "SteelDay continues the education of all participants and, with the event I attended, helps to recruit the next generation of engineers and tradespeople into the steel industry."

"If you've never attended a SteelDay event, then you're missing out on all of the innovative and practical aspects of steel construction," he added. "Plus, it's a lot of fun!"

Virtual events were also held, including AISC's "Resilient: You Can't Even Spell it Without Steel" webinar, presented by Charlie Carter, AISC vice president and chief structural engineer. If you weren't able to catch it live on SteelDay, you can view the webinar recording for free and still receive one hour of continuing education credit for watching the course video and completing an online quiz.

Additionally, AISC members crafted their own innovative steel sculptures in this year's SteelDay Sculpture Competition for a chance to be one of five finalists to have their creation on display at the 2015 NASCC: The Steel Conference, March 25–27, in Nashville, Tenn., where the ultimate winner will be chosen by attendees. Fourteen sculptures were entered in the competition, and their photos were posted to AISC's Facebook page ([www.facebook.com/aiscdotorg](http://www.facebook.com/aiscdotorg)) where fans voted for their favorites. The top five finalists heading to the 2015 Steel Conference are: Tearing Down the House by Coastal Steel; Steel Your Way Through Central PA by Ritner Steel; Making Music with Steel by Michelmann Steel; Compass Rose 001 by J.R. Hoe and Sons; and Structural Steel Supporting the World from the Inside Out by Macuch Steel Products, Inc.

Photos from this year's SteelDay can also be found on AISC's Facebook page in the "SteelDay 2014" photo album. If you'd like to share your photos on AISC's Facebook page, please contact AISC's Victoria Cservenyak at [cservenyak@aisc.org](mailto:cservenyak@aisc.org).

Next year's SteelDay is scheduled for September 25, 2015. Mark your calendar!

