



## Build 'em Tall & Strong (marshmallows included)

By Amy Hitchoff

On Saturday, June 11<sup>th</sup>, the Center for Architecture Foundation teamed up with the Structural Engineers Association of New York (SEAoNY) and the Skyscraper Museum to offer the first annual Feats of Engineering Skyscraper Building Contest. Family and high school teams packed the Center for Architecture's lecture hall to compete in building first the tallest, and then the strongest, skyscrapers.

After an introduction to skyscrapers by Michael Duddy, AIA, of MDA designgroup, contestants were given a foam base, toothpicks, marshmallows, and 30 minutes to build the tallest skyscraper.

Then, with coaching from Jorge Arteaga and Erik Madsen, structural engineers from DeSimone Consulting Engineers and members of SEAoNY, the teams learned that they had to reinforce beams, that the bottom had to be stronger and wider than the top, and how to use triangulation. With this knowledge at hand, they had another 30 minutes to build the strongest skyscraper, this time using straws as the beams and columns and modeling clay as the joints.

Special thanks to the Empire Diner for a dinner-for-four gift certificate, Erica Bell at the Law Offices of Weiss, Buell and Bell for passes to the Empire State Building observation deck, and the Skyscraper Museum for providing hats, t-shirts, puzzles, and museum passes. ■



Bruce Gordon and his daughter proudly show off their skyscraper. Photo courtesy of Jorge Arteaga.

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## NCSEA Thirteenth Annual Conference Kansas City, Missouri

Final plans are pretty much in place for the NCSEA 13<sup>th</sup> Annual Conference, which will occur October 27-29, 2005 at the Fairmont Kansas City at the Plaza in Kansas City, Missouri. Highlights of the Friday technical program—which has as its theme “Engineering the World from the Heart of America”—include:

- L. William Zahner on the design and fabrication challenges of shaped metal surfaces, such as those featured on many buildings designed by architect Frank Gehry.
- Jennifer Prichard, EI, on being part of a team responsible for designing and building a mobile siege tower in seven days using only locally available materials.
- Michelle Lahey on the unique resources available from the Linda Hall Library of Science, Engineering & Technology, which is located in Kansas City.
- Lawrence E. Kaiser, PE, on high-performance steel and synthetic reinforcement for limiting cracking in concrete structures due to temperature, shrinkage, and other effects.
- Roger A. LaBoube, PhD, PE, on a series of new standards for cold-formed steel framing design that recognize the benefits of assembly or system synergy.
- David W. Landis, PE, on the design of the new Sprint Center in Kansas City, which incorporates lessons learned on previous arena projects around the world.

- Jon A. Schmidt, PE, on equivalent static and other practical approaches for designing Department of Defense buildings to resist terrorist bomb attacks.

The Friday night dinner will be at Plaza III, one of the top ten steakhouses in the United States, with entertainment by the Skip Hawkins jazz quartet. For spouses and guests, boutique shopping and outdoor dining opportunities abound at the Plaza, built to resemble Seville, Spain.

The SEAKM-OSEA Host Committee is seeking conference Sponsors in four categories, which correspond to the top four grades of beef recognized by the United States Department of Agriculture (USDA):

- Standard - \$100 to \$249
- Select - \$250 to \$499
- Choice - \$500 to \$999
- Prime - \$1,000 or more

All Sponsors will be listed in the conference program, on a poster at the conference venue, and in a future issue of STRUCTURE magazine. If you or your firm would like to become a Sponsor, please contact NCSEA Executive Director Jeanne Vogelzang by September 30.

This promises to be the best NCSEA Annual Conference yet--**you will not want to miss it!**

*Jon A. Schmidt, P.E., SECB  
Chair, SEAKM-OSEA Host Committee* ■



## National Council of Structural Engineers Associations Thirteenth Annual Conference • Kansas City, Missouri • October 27 - 29, **ENGINEERING THE WORLD FROM THE HEART OF AMERICA** Preliminary Program Highlights

### Featured Presentations

**Keynote Address: Digital Definition and the Production of Highly Shaped Metal Surfaces**

L. William Zahner - President, A. Zahner Co. and Steven M. Huey, PE - Principal, Wallace Engineering

**Superweapons of the Ancient World: The City Destroyer**

Jennifer Prichard, EI - Structural Engineer, The Benham Companies

**Linda Hall Library: A Unique Resource for Engineers Worldwide**

Michelle Lahey - Collection Development Librarian, Linda Hall Library

**High Performance Fibers for Concrete Reinforcement**

Lawrence E. Kaiser, PE - Technical Sales Specialist, W. R. Grace & Company

**Design Standards for Cold-Formed Steel Framing**

Roger A. LaBoube, PhD, PE - Director, University of Missouri-Rolla Center for Cold-Formed Steel Structures

**Sprint Center: Applying Global Experience to a Local Project**

David W. Landis, PE - Principal, Walter P. Moore and Associates, Inc.

**Blast and Progressive Collapse Design of Military Facilities**

Jon A. Schmidt, PE - Senior Structural and Security Engineer, Burns & McDonnell



The *Fairmont* Kansas City at the Plaza

401 Ward Parkway  
Kansas City, Missouri 64112

**Reservations:** Call Fairmont Reservations at 1-800-441-1414 or the Fairmont Kansas City directly at (816) 756-1500. Reservations can also be made online at <http://www.fairmont.com/kansascity/> using Promotional Code GRNCS1 .

Single or Double Room Rate: \$129

Mention NCSEA to receive this special room rate. **This room rate is guaranteed only through October 2, 2005.**

*Staying in comfort and elegance*

Discounted airfares are available for travel to and from Kansas City on United, United Express or Ted between October 22 and November 2, 2005. Receive 5% off the lowest applicable discount fare, or 10% off the unrestricted coach fare. **An additional 5% discount will apply when tickets are purchased at least 30 days in advance of your travel date.** To receive these special fares, you or your travel agent must call the United Airlines Meeting Reservations Center at 800-521-4041 and refer to Meeting ID 530CG.



### REGISTRATION FORM

Name \_\_\_\_\_ Companion \_\_\_\_\_

Firm \_\_\_\_\_ Phone ( \_\_\_\_\_ ) \_\_\_\_\_

Address \_\_\_\_\_ Fax ( \_\_\_\_\_ ) \_\_\_\_\_

\_\_\_\_\_ Email \_\_\_\_\_

Delegate from \_\_\_\_\_  
Member Organization \_\_\_\_\_

**Member Registration** - \$495 per person

Registration fee includes Thursday evening Welcoming Reception, Professional Program, Trade Exhibits, breakfast, lunch and refreshment breaks on Friday and Saturday, Friday evening dinner in The Club at Plaza III and Saturday evening dinner at the Closing Awards Banquet.

**Companion Registration** - \$225 per person

Companion fee includes Thursday evening Welcoming Reception, Friday continental breakfast, Friday evening dinner in The Club at Plaza III, Saturday continental breakfast, and Saturday evening dinner at the Closing Awards Banquet.

**Total Amount Enclosed** \_\_\_\_\_

Credit Card Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Signature: \_\_\_\_\_  Visa  MasterCard  American Express

Disability Requirements? \_\_\_\_\_

**If paying by check, mail check payable to NCSEA, with this completed Registration Form, to:  
NCSEA • 645 North Michigan Avenue • Suite 540 • Chicago, Illinois 60611.**

**If paying by credit card, fax this completed Registration Form to NCSEA at 312-649-5840.**

Photos courtesy of Convention and Visitors Bureau of Greater Kansas City

