

ASCE Newsletter

Central Ohio Section

November 2010
Volume 15, Issue 3

CONTENT

President's Letter 2

Latest News 2-4

Calendar of Events 5

Newsletter Ads 6-7

Pay Securely
Online On Our
Web Site



NOVEMBER ASCE LUNCHEON

Date /Time: Thursday, November 18, 2010-11:30am Registration-12:00pm Lunch

Location: Longaberger Alumni House • 2200 Olentangy River Road • Columbus, OH 43210

Speakers: Katie Zorc, Eric Richards, Andrian Lee - OSU EWB Chapter

Topic: Engineers Without Borders

The Ohio State University student chapter of EWB returned to their project site of Las Pilitas in San Pedro Puxtla, El Salvador in early September. The purpose of the trip was to inspect the latrines constructed during their previous trip in March. An assessment was also done on the feasibility of biosand filters as an interim solution to provide the community with potable water. Biological and chemical tests were done on the water to determine levels of contamination. Materials pricing and sand samples were also collected for future implementation trips. The team also met with local officials for support to move the projects forward, as well as community members for additional feedback.

The presentation will discuss the results of the tests and the outcomes of the trip as a whole. It will include several pictures of the community and activities completed during the assessment.

Menu: Buffet-Style Lunch – Mexican Taco and Fajita Bar (Chicken and/or Beef), Mexican Rice and for desert Texas Sheet Cake & Cheesecake Bars

CPD Hours: A certificate for one (1) Continuing Professional Development (CPD) hour will be issued at the conclusion of the program.

Reservations: Please email (or phone in) reservations to Mike Mazzoli at mike.mazzoli@psiusa.com or (614) 876-8000 or register and pay [online](#) with a credit card. **Registration is due by 5 PM on Friday, November 12, 2010.** Late registrations and walk-ins may not be accepted. Registration fees may still be required for no-shows and registrants canceling after November 12, 2010.

Cost: \$20 ASCE Members & Guests - \$15 ASCE Life Members \$10 Students.

Payment: The preferred method of payment is [online](#) before November 12, 2010 or on the day of the event by cash or check. If you need to pay for multiple registrations, please pay by check. Checks should be made payable to Central Ohio ASCE.

Parking: Free Parking is available for this event.

2010 - 2011 BOARD OF DIRECTORS

PRESIDENT
Julie Pickering
(614) 486-4383

TREASURER
Adam Rich
(614) 797-2463

1ST VICE PRESIDENT
Michael Mazzoli
(614) 876-8000

**MEMBER-AT-LARGE /
NEWSLETTER EDITOR**
Brooks Vogel
(614) 487-1650

2ND VICE PRESIDENT
Michael Navabi
(614) 839-0379

SECRETARY
Mark Seidelmann
(614) 486-4383

WEB SITE EDITOR
Peter Narsavage
(614) 432-4030

LETTER FROM THE PRESIDENT

I hope that you have been enjoying the wonderful fall weather and have gotten a chance to enjoy the beautiful fall foliage! I'm still in disbelief that it's already November and that snow will soon be falling!

The OSU Student Chapter of *Engineers Without Borders (EWB)* will be giving a presentation on their latest *EWB* project. It should be very interesting, and I hope you can join us there! For more details, please see page 1 of this newsletter.

Thank you to those who were able to attend our October joint meeting with the Structural Engineers Association of Ohio (SEAO) and the American Concrete Institute (ACI). It included a great presentation about the Nationwide Children's Hospital Patient Tower project by Richard Geers of Jezerinac Geers & Associates. The presentation included a really great video of the construction progress from the beginning of the project, by way of time-lapse photography.

Have a wonderful November and a Happy Thanksgiving!

Thank you,

Julie L. Pickering, PE, M.ASCE
Julie.Pickering@Stantec.com

Our November luncheon will be held on Thursday, November 18th at the Longaberger House near the OSU Campus in Columbus.

CIVIL ENGINEER ONE OF AMERICA'S TOP 10 JOBS

Money magazine debuted its list of the top 100 jobs in America on Monday, Oct. 11, and "Civil Engineer" came in at number 6.

The magazine cited development in countries like China and India, as well as America's own infrastructure needs in creating a shortage of qualified local engineers. This shortage has created a bolstering demand for U.S. talent for highways, bridges, sewer and water systems, and power plants. Rankings were based on factors such as pay, future job growth, and quality of life. The magazine's story and rankings can be found by clicking [HERE](#).



HOOVER DAM BYPASS BRIDGE OPENS



On October 20, 2010, the Mike O'Callaghan – Pat Tillman Memorial Bridge, which bypasses the Hoover Dam, opened to traffic. The project links the U.S. states of Nevada and Arizona by spanning the Colorado River 1,600 ft. downstream from the Hoover Dam. The bridge, part of a \$240 million, four-lane bypass that will reroute traffic for 3.5 miles from the two-lane bottleneck on U.S. 93 across the Hoover Dam, is located approximately 25 miles southeast of Las Vegas. Once the bridge is opened, the roadway crossing the Hoover Dam will be closed to through traffic.

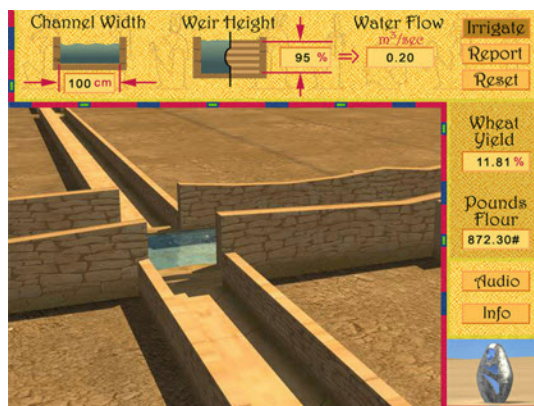
The bridge is the first concrete-steel composite arch bridge built in the United States. The twin arch ribs are connected by steel struts. The composite design, using concrete for the arch and columns with steel construction for the roadway deck, was selected for schedule and cost control while still being aesthetically compatible with Hoover Dam. The arches are made of 106 pieces—53 per arch—mostly cast-in-place 24 ft at a time.

CIVIL ENGINEERING VIDEO GAME

Time Engineers is a video game that teaches principles in civil engineering where students can time-travel to build pyramids, irrigate farm land, build a catapult, and much more.

Time Engineers teaches engineering, science, and math without leaving the fun of gaming behind. Students travel in a cool time machine to three different time periods and encounter typical engineering problems to be solved in order to build pyramids, irrigate farm land, command a WWII submarine, raise and lower medieval drawbridges, and much more.

Unlike most educational software, Time Engineers was designed to be as rich in graphics, content and game-play as most commercial games students play. It was also designed with educators in mind with an easy to understand manual and helpful teaching tools in the form of lesson plans and curriculum guides.



Produced in conjunction with the College of Engineering at Valparaiso University, Time Engineers was designed to help middle and high school students explore and apply some of the fundamental principles of engineering. In Ancient Egypt, students experiment with ramps, workers, and the type of stone to build pyramids. During World War II, they help design a submarine or a radar system. During the Middle Ages, students help design a drawbridge and a catapult. In each, there are several factors that students can adjust to be successful. The content, delivered through narration, text and interactive exercises, includes binary numbers, boolean logic, weirs and water

flow, force balance and trajectory.

To learn more please visit www.timeengineers.com. Civil engineers can purchase the game for their kids for only \$9.95 and teach them key civil engineering principles.

2011 ASCE NATIONAL PRESIDENT TAKES OFFICE

ASCE 2011 President Kathy J. Caldwell, P.E., M.ASCE, assumed office Oct. 22, 2010, at the Annual Business Meeting during the Society's 140th Annual Civil Engineering



Conference in Las Vegas. Highlighting her inaugural speech was her vision to "MOVE" our profession forward through **M** for **Momentum**, **O** for **Opportunity**, **V** for **Vision** and **E** for **Engagement**. Amongst her many goals, President Caldwell emphasized the need for continuing infrastructure development as outlined in the Infrastructure Report Card, as well as a push for sustainability and the vision for the economic, environmental and societal performance -- the "triple bottom line" -- of the world's infrastructure.

OSU LICHTENSTEIN DISTINGUISHED LECTURE SERIES

The second Lichtenstein Distinguished Lecture of the academic year will be given by Dr. R. Shankar Nair on Friday, **November 5, at 3:30 P.M.** At Dreese Labs Room 260 on the OSU Campus, 2015 Neil Avenue, Columbus, Oh. The lectures are free and attendees will receive one hour of PDH for each lecture.



Dr. R. Shankar Nair

Dr. Nair will discuss some unusual and innovative solutions from his bridge engineering practice. These include an unbalanced bascule bridge, where elimination of the counterweight and associated pit more than compensated for the additional lifting effort required (a design that has been awarded a US patent); a skewed hanging pedestrian bridge; an unusual minimum-area design for a Single Point Urban Diamond Interchange; innovations in the design of the world's longest tied-arch bridge; and the top-down construction of a subway station under an existing multi-story building. Also included will be an exploration of the evolution of arch bridge bracing systems

and the application to bridge bracing of the new Direct Analysis Method of design for stability.

Dr. Nair received his Ph.D. in civil engineering from the University of Illinois at Urbana-Champaign in 1969. In his more than 40 years of engineering practice, Dr. Nair developed the structural designs of many major bridges and buildings including the longest tied arch in the world and a 90-story, 1047-foot tall building now partly constructed in Chicago. His projects have won numerous awards, including four AISC/NSBA *Prize Bridge* awards and six Structural Engineers Association of Illinois *Most Innovative Structure* awards. He has won a Lifetime Achievement Award from AISC. He is a former chairman of the Council on Tall Buildings and Urban Habitat and is currently the chairman of the AISC Committee on Specifications. Dr. Nair was elected to the National Academy of Engineering in 2005.



ASCE CONTINUING EDUCATION WORKSHOPS

ASCE is pleased to provide the upcoming ASCE Continuing Education seminars and workshops in the Midwest Region. These in-depth, practice-oriented programs are produced by ASCE's Continuing Education Department and may be of interest to you. Please click on the links below for additional information.

DATES	SEMINARS AND COMPUTER WORKSHOP LINKS	Location
Nov. 4-5, 2010	Load Rating of Highway Bridges	Chicago, IL
Nov. 4-5, 2010	Wind Loads for Buildings and Other Structures	Chicago, IL
Nov. 17-19, 2010	HEC-HMS Computer Workshop	Cincinnati, OH
Dec. 8-10, 2010	Streambank Stabilization for Restoration and Flood Control	Chicago, IL
Feb. 17-18, 2011	Design of Lateral Force Resisting Systems in 2009 International Building Code	Cincinnati, OH
Feb. 24-25, 2011	Upgrading Treatment Plants and Pumping Stations	Chicago, IL
March 10-11, 2011	Earth Retaining Structures, Design, Construction and Inspection: Now in LRFD	Cincinnati, OH
March 10-11, 2011	HEC-HMS Computer Workshop	Chicago, IL
March 16-18, 2011	Design of Foundations for Dynamic Loads	Cincinnati, OH
March 17-18, 2011	Design of Cold Formed Steel Structures The New 2007 Specification	Chicago, IL
March 23-25, 2011	Design and Construction of Microtunneling Projects	Chicago, IL
March 24-25, 2011	Low Impact Development Applications for Water Resource Management	Madison, WI
March 24-25, 2011	Modern Detectors for Traffic Surveillance Management/Traveler Information	Chicago, IL

2010-2011 CENTRAL OHIO ASCE MEETINGS

Meeting Date	Topic	Location	Person Responsible
Thursday, September 16, 2010 Lunch	Lime Stabilization/ ODOT Projects	OSU Golf Club	Peter Narsavage
Thursday, October 21, 2010 Lunch	Childrens Hospital Projects	Lincoln Theater	Ryan Konst/ Tom Rozsits
Thursday, November 18, 2010 Lunch	Engineers Without Borders	OSU Longaberger Alumni House	Andrian Lee
Thursday, December 16, 2010 Dinner	Columbus Zoo Polar Bear Exhibit	Columbus Zoo	Tom Rozsits/ Bob Heady
Thursday, January 20, 2011 Lunch	City of Columbus Combined Sewer Overflows & Mitigation Projects	Crowne Plaza North	Michael Navabi
Thursday, February, 2010 TBA	Engineers Week	TBA	E-Week Organizer
Thursday, March 17, 2011 Lunch	West Main Street Bridge - Westerville	Villa Milano	Michael Bashor/ Jim Pajk
Thursday, April 21, 2011 Dinner	Ohio University Projects	Ohio University - TBA	Bob Heady
Thursday, May 19, 2011 Lunch	President Elect Lunch	OSU Blackwell Inn	Mike Mazzoli
June, 2011	Planning Meeting	TBA	Adam Rich

KEEP UP TO DATE

Join Our E-Mail List!
 Keep up to date with all the current events and announcements. Just go to <http://centralohioasce.com/e-mail> and follow the directions to sign up.

Visit Us On The Web:
www.centralohioasce.com

E-Mail Us:
asce@centralohioasce.com

BOARD MEETING

Our Next Board Meeting Will Be Held at 11:30 A.M. Thursday, December 2, 2010. Stantec Consulting Services 1500 Lake Shore Drive Columbus, OH

OUR PROFESSIONAL SPONSORS

Thank You

Put Your Ad Here

Business Card Ad

\$175 / year

Double Business Card Ad

\$350 / year

To purchase a newsletter ad, contact Mike Mazzoli by email at mike.mazzoli@psiusa.com or by phone at (614) 876-8000.

When the results matter now . . . and years from now.

BURGESS & NIPLE
Engineers ■ Architects ■ Planners



5085 Reed Road | Columbus, OH 43220 | 614.459.2050 | 614.451.1385 Fax
Other Ohio offices: Akron, Cincinnati, Cleveland & Painesville

BBCM | Celebrating **50+** years
SOLUTIONS TO BUILD ON

Geotechnical Engineering
Environmental Engineering
Construction Observation & Materials Testing

(800) 433-1840 • www.bbcm.com

Columbus Cleveland Cincinnati Dayton



Westerville, OH



Youngstown, OH

GEOTECHNICAL ENGINEERING
ENVIRONMENTAL SERVICES
GeoTDR

LABORATORY TESTING
DRILLING SERVICES
SITE MONITORING

(614) 895-1400 – fax (614) 895-1171
www.gci2000.com

Grumman Exploration, Inc.
*Near-surface Geophysics,
Non-destructive Subsurface Exploration*

Services

- Ground-Penetrating Radar
- Electrical Resistivity Imaging
- Electromagnetic Profiling
- Seismic Testing
- Magnetometry



“Look before you dig”

(614) 488-7860

www.GrummanExploration.com
info@GrummanExploration.com

INNOVATIVE ENGINEERING

GIS ■ Planning ■ Geotechnical ■ Design/Build
Environmental ■ Transportation ■ Water Resources
Program Management ■ Construction Services



Gannett Fleming

A Tradition of Excellence
www.gannettfleming.com

Columbus, OH ■ Phone: (614) 794-9424
Akron, OH ■ Phone: (330) 668-8800



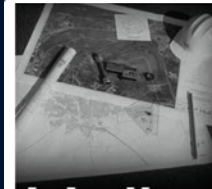
A Terracon COMPANY

Geotechnical Engineering Environmental Engineering
Construction Materials Engineering Facilities

H. C. Nutting A Terracon Company
Central Ohio Region
790 Morrison Road
Columbus, Ohio 43230

P 614.863.3113 F 614.863.0475
www.hcnutting.com & www.terracon.com

Delivering Success for Clients and Employees



From strategy development through design and construction management, Hull's Civil Engineering team can help.

Hull

& associates, inc.

614.793.8777
www.hullinc.com

Urban Revitalization | Energy | Waste Management | Environment



Achieving Exceptional Results through Management and Engineering

An innovative, full-service, single-source civil engineering & management firm providing:

- Water & Sewer Design
- Survey/GIS Mapping
- Transportation Planning/Design
- Right-of-Way Acquisition
- Construction Management
- Government Services
- Site Development
- Value-Added Services

800-229-1774
www.mecompanies.com

Jones-Stuckey Ltd., Inc.



www.jonesstuckey.com

Highways • Bridges
Civil/Site • Sewers • Waterlines
Recreation • Parks • Environmental Studies • Construction Administration

Columbus 614.486.0401 Akron 330.620.8271

Civil • Structural Engineers

OUR PROFESSIONAL SPONSORS

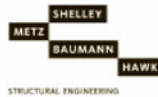
Thank You



ms consultants, inc.
engineers, architects, planners

2221 Schrock Road
Columbus, Ohio 43229-1547
614.898.7100
info@msconsultants.com
www.msconsultants.com

Offices in Ohio, Indiana, Pennsylvania, West Virginia, North Carolina & Florida

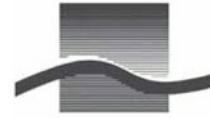


STRUCTURAL ENGINEERING

1166 Dublin Road, Suite 200
Columbus, Ohio 43215-1038

T 614 481-9800
F 614 481-9353

www.smbhinc.com



SPENCE
Environmental
Consulting, Inc.

- Environmental Assessments
- Geotechnical Engineering
- Site Remediation
- Regulatory Compliance

(614) 755-4750
www.spenceenv.com

Engineering • Planning • Architecture
Environmental • Surveys • Transportation

In Ohio, call
(614) 486-4383



One Team. Infinite Solutions.

Rated one of the best structural
engineering firms to work for
by Structural Engineer Magazine.



Steven Schaefer Associates, Inc.
Consulting Structural Engineers

815 Grandview Avenue • Suite 200 • Columbus, OH 43215 • www.ssastructural.com
Phone: 614-428-4400 • Fax: 614-428-8100
Contact: Ryan Koser rsk@ssastructural.com

KORDA

IMAGINE • CHALLENGE • INNOVATE • CREATE

Columbus office

tel: +1 614.487.1650
fax: +1 614.487.8981
web: www.korda.com
email: columbus@korda.com

1650 Watermark Drive Suite 200 | Columbus, Ohio 43215

Site Development | Transportation | Public Works | Surveying