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- January 12  
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 SWE Introduce A Girl To  
 Engineering Day



January Luncheon

11:15 am to 1:00 pm, Tuesday January 12, 2016

The Role of the St. Louis Regional Freight District in the Bi-State Area

Speaker: Mary C. Lamie, P.E.

Topic

Mary Lamie will be discussing her new role as the Executive Director of the St. Louis Regional Freight District and its role in the Bi-State area.

Bio

Mary Lamie was selected to lead the St. Louis region’s new freight district effective July 1st, 2015. Her initial responsibilities will be to evaluate the freight needs of the bi-state region and the freight network’s current operational status. She will develop public-private partnerships and create the foundation for planning, marketing and advocacy of the bi-state region as a national freight hub.

She has over 25 years of experience in transportation, engineering and management including 22 years with the Illinois Department of Transportation (IDOT). She spent the last seven years as the Deputy Director of Highways Region 5 Engineer, where she was responsible for more than 800 employees, 3,300 lane miles of state highways and 1700 bridges. Her engineering and project management experience includes a wide variety of transportation projects that require extensive coordination with local, state and national leaders.

Her most recent efforts have also focused on working with governmental agencies and the private industry developing and setting transportation priorities and funding strategies.

Details/Reservations

Reservations can be made at the following link to the right:  
 Cost: \$15/person, students \$5, members in transition \$5 (checks payable to ASCE).  
 Contact Kurt at the Engineers’ Club for reservations by noon the Friday before the event. Phone: 314-533-9333, fax: 314-533-9336, email: [kurt.krispin@engineersclub.net](mailto:kurt.krispin@engineersclub.net)



<http://goo.gl/gsXbi>

ASCE is charged for all reserved lunches. If you’ve signed up and can’t make it, please cancel with Kurt by Friday before the meeting or we will have to charge you for the meal. 1 PDH is typically awarded to attendees.

## Officers & Directors 2015 - 2016

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## President's Message

*Michael Buechter*

As I write this month (Monday, 12/28) the Lambert Airport rainfall gage shows a total rainfall of 8.65 inches since Christmas day and it is still raining. Westbound lanes of Interstate 70 in St. Charles County have reopened today, however all eastbound lanes are still closed due to flood water. In total, more than 180 MoDOT maintained roads across the state closed due to flooding. Mississippi river levels at Alton are expected to reach nearly 39 feet by Thursday, only 3.7 feet lower than the 1993 record. In St. Louis, the river is expected to crest just shy of 45 feet, which would rank only behind the 49.6 feet recorded during the flood of '93.

As we all know, these historic December rainfalls followed historic rainfall levels this past June. Measurements taken at Lambert Airport had 13.14 inches for the month of June. That is about nine inches above normal, the previous record was 12.35 inches in 2003. On Sunday afternoon 12/27, as rain continued to pummel much of the St. Louis region, 2015 officially became the wettest year on record.

With historic weather patterns much of the Infrastructure in our local community is surely getting a severe test. The Contractors and field crews working directly in this weather are doing us all a great

service. Yet much of our infrastructure is in aging and poor condition. The St. Louis Section's 2013 Report Card for Missouri's Infrastructure gave the region's infrastructure an overall grade of "C-." At a national level ASCE finds that failure to increase infrastructure investment by 2020 will result in a negative GDP impact of \$3.1 trillion, almost the equivalent of Germany's entire GDP. Both the local and national report cards may be found on-line at: <http://sections.asce.org/stlouis/>

ASCE at both the local and national level provides many opportunities to learn about and influence discussions regarding our nation's infrastructure. These opportunities range from active committee involvement, standards development to ASCE's "Key Contact Program." At a local level you may learn more about these activities from our Government & Public Relations Committee Chair, Dennis Boll, [dfb@geotechnology.com](mailto:dfb@geotechnology.com). We are also in need of a Public Information Coordinator, a position that may contribute to the discussion at a local level.



Workers with Ameren Illinois shutting off gas lines  
<http://www.stltoday.com/>

So now is the time for New Year's resolutions, consider ASCE in making any New Year's resolutions, especially those related to service or professional development. If you have any questions about anything or wish to become more active in ASCE please call or email me, Michael T. Buechter at 314-768-2772 or mtbuec@stlmsd.com. If you have not already planned on it, please join us for our January luncheon as we continue our annual cooperation with the St. Louis Post of SAME with a joint meeting at the Engineering Center of St. Louis.

Happy New Year!

Michael T. Buechter, PE

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## ASCE Younger Members

### **January YMG Meeting:**

Tuesday, January 12, 2016

### **Schlafly Bottleworks**

7260 Southwest Ave., 63143

6 pm to 8 pm

<http://schlafly.com/bottleworks/>

- Central Region Younger Member Council (CRYMC) Conference will be held January 15-16 in Chicago IL. (Along with the Student/other leadership conferences in concurrence with ours).
- Alberici Fabrication Shop Tour: January 22, 2016
- TRIVIA TRIVIA TRIVIA: February 26, 2016

We need help getting our annual trivia night off the ground. This is will a big part of the discussion on Tuesday. In particular, we need people to create questions and gather auction items. I have 3 people getting questions together...I need 7 more.

## Networking Events

***Friday, January 22, 2016, 3:00pm – 5:00 pm***

### ***PRESENTATION AND TOUR OF HILLSDALE FABRICATORS***

***Presenter and Host: Chris Toenjes, PE***



At 3:00pm meet at Main Office located at 2150 Kienlen Avenue, St. Louis, MO 63121 for a Presentation on Hillsdale's projects and capabilities followed by a tour of the fabrication facilities.

Bring hard hat, safety glasses and closed toed shoes.

To attend, please contact Joe Sturgeon at [wsturgeon@hntb.com](mailto:wsturgeon@hntb.com) by January 15. Maximum attendees: 30

Geo-Institute SIUE chapter presents:

## Geotechnical Workshop - 10 PDH Credits



**Title:** Introduction to Computational Geotechnics (GW0116)

**Date:** January 22 & 23, 2016

**Time:** 10 AM to 4 PM

**Location:** School of Engineering, Southern Illinois University, Edwardsville, IL

### Registration:

Please fill the registration form: [www.zamiran.net/GW0116.html](http://www.zamiran.net/GW0116.html)

No registration fee is required!

### Workshop Objectives:

This course is an introduction to modeling geotechnical problems using commercially available geotechnical software. Different geotechnical programs and numerical methods will be discussed and compared with each other. Principles of numerical modeling will be described. The modeling procedure for several practical geotechnical examples will be demonstrated using FLAC and GeoStudio software package.

The workshop is very useful for students and professionals in the field of civil, geotechnical, and mining engineering.

### Instructor:

Siavash Zamiran,  
Ph.D. Candidate, Instructor  
President, Geo-Institute SIUE  
Southern Illinois University

### Contact Information:

Phone: 618-334-4572  
Email: [zamiran@siu.edu](mailto:zamiran@siu.edu)  
Website: [www.zamiran.net](http://www.zamiran.net)  
[www.linkedin.com/in/zamiran](http://www.linkedin.com/in/zamiran)



Geo-Institute of ASCE – St. Louis Chapter

Presents a webinar titled

## Approaches to Grouting in Karst

Michael J. Byle, P.E., D.GE, F.ASCE

**DATE AND TIME:** Thursday, January 28, 2016, Doors open at 10:00 for registration  
Webinar 10:30AM to 12:00PM

(Pizza and soda/water will be provided toward the end of the program)

**LOCATION:** Geotechnology, 11816 Lackland Road, Suite 150 Saint Louis, Missouri 63146

**COST:** \$10.00

**RSVP:** Please register at the event site at the following link or by emailing [pmk@shanwil.com](mailto:pmk@shanwil.com).

<http://events.constantcontact.com/register/event?llr=yonzmehab&oeidk=a07ebv2kg2zfa639e85>

# Introduce A Girl To Engineering Day



**Help get girls involved in engineering!**

Is she innovative? Is she curious? Does she like problem solving? Is she imaginative? Does she want to make a difference? If so, then this is the place for her!

- \* **Who:** girls 5<sup>th</sup> – 8<sup>th</sup> grade
- \* **When:** February 20<sup>th</sup>, 2016  
8:30 am – 3:00 pm
- \* **Make-up Date:** March 19<sup>th</sup>, 2016
- \* **Where:** SIUE School of Engineering
- \* **Registration:** \$15 includes activities, lunch, and a t-shirt



**Register at:** <https://sites.google.com/site/swesiue/igeday>

**SIUE**


**SIUE Society of Women Engineers**

SIUE School of Engineering Campus

Box 1801 Edwardsville, IL 62026

[swesiue@gmail.com](mailto:swesiue@gmail.com)

[www.facebook.com/swesiue](http://www.facebook.com/swesiue)



**ASCE** AMERICAN SOCIETY  
OF CIVIL ENGINEERS

Younger Member Group Presents

The 6<sup>th</sup> Annual

# trivia night!

@  
The Kirkwood Community Center, East Gym  
111 S. Geyer Road, Kirkwood, MO 63122

Friday **February 26<sup>th</sup>, 2016**  
7pm (Doors at 6:30pm)

**\$150/Table of 8**  
(\$25/person for incomplete tables)

Raffle Prizes  
50/50

Gift Prizes  
Games

BYOB  
Complimentary Soda/Water

**OPEN TO EVERYONE**  
(no engineering questions, we promise!)

RSVP or Questions to: Joe Sturgeon  
314-242-2237  
[wsturgeon@hntb.com](mailto:wsturgeon@hntb.com)

The American Society of Civil Engineers (ASCE) Younger Members group fundraiser proceeds benefit the ASCE Younger Member St. Louis section, and provides the means to help grow our community.

**Civil FE Exam – Review Course  
Fall 2015 / Spring 2016**

Schedule: TBD

Location: Saint Louis University  
3450 Lindell Boulevard,  
Saint Louis, MO 63103

*A review opportunity as a service to the Saint Louis Civil Engineering Community  
Brought to you by SLU ASCE Student Chapter*

**Course Description:** Review of all the FE Exam topics (18). The first part of the course will cover the topics from the general section: mathematics, probability and statistics, computational tools, ethics and professional practice, engineering economics, statics, dynamics, mechanics of materials, fluid mechanics. The second part of the course will address the civil engineering specific sections: materials, hydraulics and hydrologic systems, structural analysis, structural design, geotechnical engineering, transportation engineering, environmental engineering, construction, and surveying.

The course will emphasize on the following points:

- Main strategies and tricks to follow to prepare and pass the exam.
- Recommended bibliography and how to manage it.
- Key theoretical concepts within each discipline.
- Complete understanding of the handbook.
- Selected and concrete exercises necessary to understand the tricky concepts.
- Analysis of common and most repeated mistakes.

**Instructor Information:** Carlos A. Merino is a Civil and Territory Engineer graduated in 2014 from the Universidad Politécnica de Madrid (Madrid, Spain). He is currently doing his second year of his M.S. in Structural / Civil Engineering at Parks College of Engineering, Aviation, and Technology (Saint Louis University). He is also a graduate assistant carrying out research and teaching tasks within the Civil Engineering Department. He plans to graduate on May 2016 and he is on the process of obtaining his E.I. license after passing the Civil Engineering FE exam on July 2015. He is also a member of the ASCE and EWB SLU Student Chapters.

<b>Name:</b>	Carlos Alberto Merino, Civil and Territory Engineer. S.M. ASCE, 2 <sup>nd</sup> Year M.S. Civil Engineering Student, Graduate Assistant
<b>Contact information:</b>	<a href="mailto:merinoca@slu.edu">merinoca@slu.edu</a> 816-282-4290 (cell)

**Scope of the course:** the Civil FE exam is not hard to pass, but it takes time and effort to organize all the subjects and refresh your knowledge. This point is where this course can be useful. The course will provide the students an effective strategy to prepare the exam. In a review course of these characteristics, it would not be possible do a lot of exercises. Furthermore, based on my own experience, this has to be a responsibility of the student in order to face the exam with confident and to have higher chances of passing it. Because of



that, the course will emphasize on an effective management of the materials and different subjects in order to save study time and being in a good shape at the time of studying it.

**Notes and required materials:** The students will take their own notes. The FE Exam Handbook will be also followed in class to write down and mark important concepts and details on it. It is highly recommended to print it out to follow the classes efficiently. The handbook is the only resource provided on the test, so getting familiar with it is one of the keys to be successful when taking the test. Furthermore, the students will get guidance regarding recommended bibliography to prepare the exam. No printed handouts will be provided.

**Sessions:** The course will have 15 sessions of 1.5-2 hours per session.

**Fee (per student):** 60\$ total (for all the 15 sessions)

**Tentative Schedule:**

Week	Topics
1	Introduction, Units, Mathematics
2	Probability and Statistics
3	Statics, Computational Tools
4	Dynamics
5	Mechanics of Materials
6	Fluid Mechanics
7	Engineering Economics
8	Structural Analysis, Ethics
9	Hydraulic and Hydrologic Systems
10	Materials
11	Structural Design
12	Geotechnical Engineering
13	Transportation Engineering
14	Construction
15	Surveying, Environmental Engineering

**Enrollment:** If you are interested please send the following information to the instructor email

First and Last Name:	
Email address:	
University or Company Name	
Graduation Year (or expected)	
Preferred week days and time	

\*A minimum of 15 students will be required to offer the review course.



# Engineering Education Center



"I selected Missouri S&T for convenience, affordability, and the quality of education."

*Mirna Palavric, EMgt'12*



Working professionals know the value of an education from Missouri University of Science and Technology's Engineering Education Center in St. Louis.

## Education that Fits.

Promote your career and enhance your earning potential by taking classes at the EEC. Classes are taught in the evening and live-streamed over the Internet, providing the flexibility you need to earn your graduate degree or certificate while you work. Choose from more than 40 graduate certificate programs and 17 advanced degrees.

### Distance Graduate Degrees include:

Aerospace Engineering (MS/PhD)  
Business Administration (MBA)  
Civil Engineering (MS)  
Computer Engineering (MS)  
Computer Science (MS)  
Electrical Engineering (MS)  
Engineering Management (MS)  
Environmental Engineering (MS)  
Explosives Engineering (MS/PhD\*)

Geotechnics (ME)  
Industrial/Organizational Psychology (MS)\*  
Information Science and Technology (MS)  
Manufacturing Engineering (MS/ME)  
Mechanical Engineering (MS/PhD)  
Mining Engineering (ME)  
Systems Engineering (MS/PhD)  
Technical Communication (MS)

*\*Degrees pending approval.*



**eec.mst.edu**  
eec@mst.edu | 314-835-9822



**Missouri University of Science and Technology**  
A Premier Technological Research University | Founded 1870

## Employment Opportunities

### **MS&T Engineering Education Center Adjunct Faculty Position**

The Engineering Education Center of the Missouri University of Science and Technology (EEC) has an opening for an adjunct faculty to teach the graduate course Construction Methods in the Fall 2016 semester. This course covers the introduction to construction planning, selection of equipment and familiarization with standard methods for horizontal and vertical construction. Application of network analysis and schedules to project control is also considered. The course will be taught from the EEC that is located near the intersection of I-270 and Manchester Road. The classes are conducted once a week, in the evening.

The successful candidate should have a MS or PhD degree in Civil Engineering (PE preferred).

The inquiries should be directed to Mrs. Debbie Benenati [dbenenat@mst.edu](mailto:dbenenat@mst.edu).

### **Water Resources Engineering Faculty Position**

The Department of Civil Engineering at Southern Illinois University Edwardsville is seeking to fill one tenure track position in Civil Engineering at the Assistant Professor level to begin August 16, 2016. The successful candidate must have the ability to teach undergraduate and graduate courses in civil engineering with emphasis in water resources and environmental engineering, establish and sustain an externally funded research program with emphasis in water resources and related areas, and participate in service activities. Candidates with a background in engineering hydrology, water resources, or watershed management are preferred. A background allowing candidates to work with existing civil engineering faculty, including across sub-disciplines is an asset. Candidates should have an educational background that would permit licensure as a professional engineer, must hold at least one degree in civil, water resources, or environmental engineering, and must be nearing completion of or already possess a doctoral degree in civil engineering or a closely related field. Information about the department can be found at [www.siu.edu/engineering/civilengineering/](http://www.siu.edu/engineering/civilengineering/).

Interested persons should send a letter of interest, the curriculum vita with a list of three references, teaching and research statement (one to two page each), with all of materials assembled into one PDF file to [ce-admin@siue.edu](mailto:ce-admin@siue.edu). Review of applications will begin on January 11, 2016 and will continue until the position is filled. Further information can be found at:

[www.siu.edu/employment/employmentopportunities/engineering/FY16-035.shtml](http://www.siu.edu/employment/employmentopportunities/engineering/FY16-035.shtml)

## To submit items to the newsletter...

Please try to get all announcements for placement in the newsletter to the Newsletter Editor by the 15<sup>th</sup> of the month prior to publication. Items may be sent via e-mail to Joe Sturgeon at [wsturgeon@hntb.com](mailto:wsturgeon@hntb.com). MS Word files are the preferred file type. PDF files are also acceptable but may not look as sharp when inserted into the newsletter and hyperlinks might not carry through to the final version. For multiple page announcements, please consider providing a single-page flyer, concisely worded, with links provided to ancillary pages such as registration forms or other attachments. Also, please clearly include in the email subject line a concise title for the announcement and desired month(s) of publication.

Most news items will be available on the Section's Web Page, which can be reached via the link on ASCE National Website ([www.asce.org](http://www.asce.org)). Click on "Geographical and International Units" to link to the Section or go directly to our page at: <http://sections.asce.org/stlouis/index.html>. The Section's Website Editor is Jeff Smith e-mail: [JESmith@HNTB.com](mailto:JESmith@HNTB.com) or via feedback directly from our website.

For more information and updates see our Web Page: [Http://sections.asce.org/stlouis/index.html](http://sections.asce.org/stlouis/index.html)

This newsletter will be sent to all Section members via e-mail. Delivery of the newsletter hardcopy by First Class mail will be made upon request. Members have the responsibility to keep their contact information in the ASCE national database up to date. Please note that the St. Louis Section is only provided with members' PRIMARY information on file at the Society level. To ensure that we can contact you, please edit your PRIMARY information to contain the information where you would like the section to contact you and how you would like your information to appear in our annual roster.

***Please be sure to keep your PRIMARY contact information up-to-date by contacting ASCE at <http://www.asce.org>, or call 800-548-ASCE (2723).***



**ASCE – St. Louis Section**  
**c/o The Engineers' Club of St. Louis**  
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