President’s Message

As we head into December, we start to think about the Holiday season, and reflect on the year that is coming to a close. The construction industry was quite strong in the St. Louis area in 2017, so hopefully you had a successful year, and are looking forward to an even more successful 2018. If you’re like me, it is also this time of year that we need to be reminded to renew our ASCE membership. One of the things on the Christmas list of the St. Louis Section is a Membership Champion. We have needed to fill this position for some time, so if any of you are looking for ways to be more involved with the section, please consider this position, or help out on another committee.

The primary goals of the Membership Champion are to not only help transition student and younger members into active full ASCE members, but also to educate current ASCE members on all of the benefits that your membership brings. Some members may mostly spend their time on local technical committees, or maybe just don’t have a lot of time for ASCE right now, and don’t realize all of the things that ASCE is doing for the profession on both a local and national level.

ASCE has taken a leading role in shining a light on the nation’s aging and underperforming infrastructure. Our local Government Relations Committee and their National ASCE counterparts serve as the voice of the profession in monitoring and influencing public policy, engaging lawmakers on important issues for the profession, and communicating the progress to the membership. Additionally, any member in good standing can become an ASCE Key Contact, which helps advocate the Society’s strategic priorities. ASCE Key Contacts receive training and tools to support their advocacy efforts. ASCE also offers to its sections complimentary advocacy and media relations training, Government Relations University, and Public Relations University.

Other resources that I hope you are taking advantage of include access to the ASCE institutes, which provide technical and professional resources and professional development opportunities in specialty civil areas. ASCE also offers dozens of conferences and other events as an opportunity to gather with experts in the field. There are many great technical events hosted by the various technical committees and ASCE institutes right here in St. Louis.

I hope you are taking advantage of all of the benefits of your ASCE membership. Some I’ve described here, but many more resources can be found by spending a few minutes on the Society’s website, www.asce.org. Please also feel free to reach out to the Executive Board, and let us know if we can provide any additional resources for you.

Have a very Merry Christmas, and Happy New Year!

Respectfully,

Lyle Simonton, P.E.
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2016 - 2017

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Director of Technical Development
Chris Toenjes

Past President
Matt Harper

ASCE Younger Members Group

See you at our Next Meeting!

Thanks to everyone who came out to our meeting at McGurks last month! Join us for our next meeting at ITAP! Plan on attending? E-mail Melissa.Marks@ch2m.com

December YMG Meeting:
Thursday, December 14, 2017
International Tap House
1711 S. 9th Street
6 pm to 8 pm
https://www.internationaltaphouse.com/

Operation Food Search – Volunteer Opportunity

Our Younger Members Group will be volunteering at Operation Food Search on December 15th from 3-5 PM. Operation Food Search is a non-profit dedicated to ending hunger in the St. Louis Area. Please e-mail Melissa at Melissa.Marks@ch2m.com if you are interested in volunteering!

Stay connected with us on Facebook at https://www.facebook.com/ASCEStLYMG/

Call for Concrete Canoe Judges

Southern Illinois University Carbondale is hosting this year’s Mid-Continent Student Conference April 19-21, 2018. We are in search of engineers within the St. Louis ASCE section that might be willing to donate their time and expertise in judging the student competitions. We welcome all professionals and especially those with past concrete canoe or geo-wall judging experience. If interested in judging either of the competitions, please email Addison Jobe at jobey248@siu.edu
Administration Openings

ASCE St. Louis Section is seeking dedicated members to open chair committees as briefly described below, with the opportunity that the incoming chair will “make it their own.”

Membership Champion - The Membership Champion will be responsible for promoting membership in ASCE of all qualified civil engineers, and to encourage active membership in the local section by all ASCE members in the area. Responsibilities also include outreach to non-member civil engineers in the area, inviting them to Section meetings, and encouraging them to join and become active in ASCE.

Webinar - From Civil Engineer to Manager

Anthony Fasano, P.E., author of the ASCE Careers & Leadership Blog and host of The Civil Engineering Podcast will be giving a complimentary webinar for all ASCE YMF members on December 13th entitled: From Civil Engineer to Manager: How to Become an Effective Civil Engineering Manager from any Stage in Your Career. You can register through this link and if you can’t make the live session, you will be emailed a recording: http://bit.ly/ASCEYMFmanager

ASCE St. Louis Section January Luncheon

EWRI and SAME are joint hosting the ASCE St. Louis Section January luncheon. Jamie McVicker will be speaking on “Evolving Corps of Engineers Levee Safety Program”

Time, Date, Location
11:30am to 1:00pm, January 18, 2018, at the Engineering Center, 4359 Lindell, St. Louis 63108. Registration starts at 11:30am and lunch is served at 11:45am.
EWRI St. Louis Monthly Speaker Series Event

The St. Louis Section of EWRI is pleased to announce our monthly webinar, jointly sponsored by Missouri University of Science and Technology, on Thursday, December 14, 2017 at 11:30 am-12:30 pm.

This presentation will be broadcast live over a webinar. Registration is free for in-person (at USGS in Rolla) or webinar attendance. **Advance registration is required by Noon Monday, December 11, 2017** Please register online in advance at the following link:

https://goo.gl/forms/lbTw1iiHlr5Opjdl2

Registrants will receive detailed login & dial in information or directions for in-person attendance prior to the event.

101 and 107 Frontenac Forest Storm Improvements

If a creek is failing, do you know why it is failing? Are the issues local or regional? Is it failing laterally or vertically? What if you want to create an essentially new, stable and “natural” channel? How large and what shape do you make the cross-section? How do you stabilize the banks using native vegetation? In this webinar, Len Madalon will illustrate his application of the principles of Fluvial Geomorphology and the use of a Rapid Geomorphic Assessment to the design of the ASCE and APWA Project of the Year, the 101 and 107 Frontenac Forest Storm Improvements.

**Speaker:** Len Madalon, MS, PE leads the Civil Engineering Department for EDM Incorporated, a professional consulting/design firm that offers services in civil, structural and MEP building systems. Len is a native of the St. Louis Area. He received his Bachelor’s and Masters degrees in Civil Engineering from Purdue University. After working 5 years in Planning and Engineering for the San Francisco District, COE, he fulfilled a lifelong goal of service in the third world by teaching Physics and Computers in Kathmandu, Nepal for 2 years. Subsequent reflection in a 30-day retreat led him to make sustainable civil engineering design through the use of native vegetation, a point of emphasis. He returned to St. Louis in 1998, and completed 30 hours of coursework in the environmental and biological sciences, while continuing his career as a civil engineer. Len is in his 16th year with EDM. He now resides in Shrewsberry, Missouri with his wife and three sons.

Thank you to our joint seminar sponsor, Missouri University of Science and Technology! Please contact Robert Holmes (bholmes@usgs.gov) with any questions, if you are interested in presenting, or have an idea for a topic.
Geo-Institute of ASCE – St. Louis Chapter

Presents a webinar titled

Design of Slab on Grade for Light Buildings on Shrink Swell Soils

DATE AND TIME: Thursday, December 14, 2017
Doors open at 10:00AM for registration live webinar from 10:30AM to 12:00PM Pizza and soda/water will be provided.

LOCATION: Geotechnology, 11816 Lackland Road, Suite 150, St. Louis, MO 63146
Remote access is not available.

COST: $10.00 per person. Payment can be made by cash, credit card, or check (payable to “ASCE St. Louis Section”)

PDH: Attendees will earn 1.5 PDH

RSVP: Please register by Tuesday, December 12 at https://goo.gl/muUAfh (case sensitive)

Learners will be able to:

- Explain the reason for distress in one to two story buildings on shrink swell soils
- Explain the role of water tension in soil behavior
- List the steps in the design of stiffened slabs on grade on shrink swell soils by the new method
- Use the spread sheet which automates the design of stiffened slabs on grade on shrink swell soils

If you’ve signed up and can’t make it, please cancel with Jake Schaeffer (jschaeffer@mps-il.com or 314-560-9154) by Tuesday, December 12 or we will have to charge you for the meal.
The St. Louis chapter of the Geo-Institute of ASCE awarded the 2017 Geo-Confluence Research Scholarship. The scholarship is aimed to promote geotechnical research at Midwestern universities that would benefit the local state of engineering practice. The scholarship is supported by funds generated from the chapter’s annual event, Geo-Structures Confluence.

This year’s scholarship was awarded to Mr. Xiaolong Xia from Missouri University of Science and Technology, Rolla for his promising work on unsaturated soil mechanics, and to Mr. Sandeep Goud Burra from Southern Illinois University at Carbondale for continuation of his work on assessment of liquefaction potential of Southern Illinois soils.

In the picture from left to right: Lyle Simonton (President, ASCE St. Louis Section), Pravin Jha (Scholarship Chair, Geo-Institute St. Louis chapter), Sandeep Goud Burra (2017 scholarship recipient), Jeff Hill (Chair, Geo-Structures Confluence), Xiaolong Xia (2017 scholarship recipient), and Shari Cunningham (Chair, Geo-Institute St. Louis chapter)
Employment

Civil Engineer – Entry Level to 5+ years

Oates Associates is an established engineering practice offering civil and structural engineering services for transportation, site and building projects. To accommodate the continued growth in our civil engineering department, we are seeking entry level to 5+ years civil engineers. Work will be out of our Collinsville, IL and/or our St. Louis, MO offices. The ideal candidate will possess the following:

- Bachelors in Civil Engineering;
- EIT certificate;
- 0 – 5+ years civil engineering experience;
- MicroStation / Geopak / AutoCAD Civil D3D is a plus;
- Strong writing and presentation skills;
- Desire and focus on technical skills in one or more of the following areas:
  - Hydrology and Drainage Design.
  - Transportation Planning.
  - Highway and Local Agency Design.
  - Traffic and Intersection Design.
  - Multi-Use Path and Park Design.
  - Commercial Site Design.

The firm is an equal opportunity employer that offers competitive salaries, an excellent benefit package, great working environment in new office space, flex-time, opportunity for quick advancement and ownership potential. We seek to develop a more diversified workforce and welcome female, minority and veteran candidates for this position. Please send resume and salary history to:

OATES ASSOCIATES, INC.
100 Lanter Court, Suite 1
Collinsville, IL 62234
618.345.2200
618.345.7233
oai@oatesassociates.com
www.oatesassociates.com
Structural Engineer – 5 to 10 years

Oates Associates is an established engineering practice offering civil and structural engineering services for transportation, site and building projects. To accommodate the continued growth in our building and site department, we are seeking a structural engineer for a project engineer/manager position. Work will be out of our St. Louis, MO office. The ideal candidate will possess the following:

- Bachelors in Civil or Architectural Engineering – Masters is a plus;
- PE license – SE license is a plus;
- 5 - 10 years of engineering experience;
- Proficient in AutoCAD and Microsoft Office;
- Strong writing and presentation skills;
- Experience performing construction administration tasks;
- Working knowledge of structural engineering software (RAM, RISA) - REQUIRED;
- Working knowledge of building codes (IBC, ASCE, ACI, AISC) - REQUIRED;
- Construction Drawing and Specification Preparation - REQUIRED.
- Strong Technical skills in the following areas is a plus:
  - Structural Steel Design.
  - Reinforced Concrete Design.
- Demonstrated ability to market and sell professional services to existing and prospective clients.

The firm is an equal opportunity employer that offers competitive salaries, an excellent benefit package, great working environment in new office space, flex-time, opportunity for quick advancement and ownership potential. We seek to develop a more diversified workforce and welcome female, minority and veteran candidates for this position. Please send resume and salary history to:

OATES ASSOCIATES, INC.
100 Lanter Court, Suite 1
Collinsville, IL 62234
618.345.2200
618.345.7233
oai@oatesassociates.com
www.oatesassociates.com
Heneghan & Associates, P.C., a civil engineering and land surveying firm with offices in Centralia, Columbia, Godfrey and Jerseyville, IL, is seeking civil engineers for positions in our new Arnold, MO office. Positions are full-time salaried with generous benefits. Heneghan and Associates is a progressive, family-oriented company with great working environment and opportunities for growth and ownership.

All candidates must be familiar with AutoCAD, able to work independently and as part of a team, and have excellent communication skills.

Civil Engineer
- B.S. in Civil Engineering
- Missouri PE license
- Minimum of fifteen years of experience in civil engineering design, project management, and client management

Civil Engineer – Transportation / Land Development
- B.S. in Civil Engineering
- Missouri PE license
- Minimum of five years of experience in transportation/land development design

Civil Engineer – Water / Wastewater
- B.S. in Civil Engineering
- Missouri PE license
- Minimum of five years of experience in water/wastewater design and permitting

Potential for involvement in all disciplines; transportation, land development, water, and wastewater projects, as well as project management and proposal development.

Heneghan and Associates, P.C. is an equal opportunity employer. Please forward your detailed resume and salary history to:

Heneghan & Associates, P.C.
1004 State Highway 16
Jerseyville, IL 62052
618.498.6418 (P)
618.498.6410 (F)
resume@heneghanassoc.com

“DEDICATING OUR SERVICES TO STRENGTHEN CLIENT TRUST”
CIVIL ENGINEER Design – Capital Projects

The Metropolitan St. Louis Sewer District (MSD) is a Missouri State special purpose political subdivision that is responsible for the St. Louis area’s storm water and sewer collection and treatment. MSD ranks in the nation’s top wastewater utilities, and is making a significant investment in capital infrastructure and asset sustainability over a multi-decade period.

The District is seeking an individual to fill a position within the Engineering Department - Design Division. This Project Manager position in the Capital Projects group will be responsible for coordinating the work of outside consulting firms. Duties will include, but not necessarily be limited to oversight of the design of storm, sanitary/combined sewers, and green infrastructure improvements; review plans, specifications and cost estimates; address concerns of impacted property owners; participation in meetings with public officials and the public at large to answer questions about the construction project; and other matters associated with the successful completion of the District’s capital construction program.

Must be a graduate from a recognized college or university with major course work in civil engineering; and four years of progressively responsible related engineering experience, including at least two years of experience in sewer plan design and review and/or construction. Must be a licensed professional engineer in the Missouri or have the ability to become licensed within six (6) months of the date of hire.

Excellent compensation/benefits program. For more information and to apply go to www.stlmsd.com/careers under Civil Engineer.

Metropolitan St. Louis Sewer District
Human Resources
2350 Market St.
St. Louis, MO. 63103
EEO M/F/V/H
University News

Gain the Competitive Edge

Whether you are a working professional or a full-time student, the Southern Illinois University Edwardsville School of Engineering graduate program will prepare you for advancement opportunities, placing you in a better position to boost your salary potential and attain career goals in a competitive job market.

- Pursue a graduate degree in civil engineering while gaining expertise in the field.
- Choose a concentration in geotechnical, environmental, structural or transportation engineering.
- Conduct field and lab-based research and learn from highly-qualified faculty who are experts in their respective fields.

New! Earn Your Master’s Degree with a Geotechnical Engineering Specialization

SIUE’s Civil Engineering Program is expanding offerings in the geotechnical area to better suit the needs of students and local professionals. All courses are offered in the evening.

<table>
<thead>
<tr>
<th>Summer 2017</th>
<th>Spring 2018</th>
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<tbody>
<tr>
<td>CE 435 Pavement Design</td>
<td>CE 492-12 Environmental Geotechnics</td>
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<tr>
<td>CE 592-001 Design of Levees and Floodwalls</td>
<td>CE 548 Finite Elements</td>
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<td>CE 592-11 Geotechnical Earthquake Engineering</td>
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<th>Fall 2017</th>
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<tr>
<td>CE 457 Soil Mechanics in Engineering</td>
<td>More information is available at:</td>
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<tr>
<td>CE 492-11 Soil Improvement Methods</td>
<td><a href="http://www.siue.edu/engineering/civilengineering/graduate/geotechnical.shtml">http://www.siue.edu/engineering/civilengineering/graduate/geotechnical.shtml</a></td>
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<tr>
<td>CE 592-02 Advanced Soil Mechanics</td>
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If you are interested in the graduate program, contact Dr. Huang at jiahuan@siue.edu. For information on the geotechnical program, contact Dr. Reza Osouli at aosouli@siue.edu.

[siue.edu/engineering](http://siue.edu/engineering)
CVNG 4350/5350 - Physical and Numerical Hydraulic Modeling

Spring 2018: 4:35 to 5:50 on Mondays and Wednesdays

Techniques for physical and numerical hydraulic modeling with a focus on open-channel flow applications.

River models allow you predict water depth, flow velocity and sediment transport in complex waterways including river reaches, estuaries, and bays.

3 credit hour course

Prerequisite: CVNG 3130 – Hydraulic Engineering, or instructor approval

**Physical Modeling**
- Scaling Techniques and Theory (Similitude and Dimensional Analysis)
- Physical Modeling of Single-phase Flow (water), and Mobile-boundary Flow (erosion and sedimentation).
- Design, Construction, Instrumentation, and Operation of Physical Models
- Case Studies

**Numerical Modeling**
- Governing Equations and Turbulence Models
- Project Background Data and Model Development
  - Processing LiDAR data
  - 2-D Models
  - 3-D Models
  - Sediment Transport Models
- 2-D and 3-D Modeling
  - 2-D hydrodynamic modeling using Surface-water Modeling Solution (SMS) with SRH-2D and ADH
  - CFD Modeling using STAR-CCM+
- Case Studies
The Department of Civil Engineering at Saint Louis University will be offering the following courses in the Spring 2018 semester (starts January 16, 2018):

- **CVNG 4350/5350 - Physical and Numerical Hydraulic Modeling**  
  Instructor: Amanda Cox, Ph.D., P.E.

- **CVNG 4150/5150 - Prestressed Concrete**  
  Instructor: Chris Carroll, Ph.D., P.E.

- **CVNG 4130/5130 – Bridge Engineering**  
  Instructor: Daniel H. Tobias, Ph.D., P.E., S.E.

- **CVNG 4150/5150 – Environmental Solutions in Developing Countries**  
  Instructor: Craig Adams, Ph.D., P.E.

More details on each course in the following pages. You can also search for courses going to this link:  
[https://banner.slu.edu/ssbprd/bwckschd.p_disp_dyn_sched](https://banner.slu.edu/ssbprd/bwckschd.p_disp_dyn_sched)  
Then select term, and then select academic department
Looking for way to fit an advanced degree into your busy schedule?

Graduate degrees and certificates from Missouri S&T are available to working professionals via Missouri S&T Global – St. Louis (formerly Engineering Education Center).

Our classes are tailored to your needs and your degree is identical to that received by full-time students on the main campus.

Choose from 18 graduate degree programs and more than 50 graduate certificates.

To learn more, contact us by phone at 314-835-9822 or email global-stl@mst.edu.

APPLY TODAY!
Classes start January 16, 2018!

DISTANCE GRADUATE DEGREES & CERTIFICATE PROGRAMS

- Aerospace Engineering (MS)
- Business Administration (MBA)
- Chemical Engineering (MS)
- Civil Engineering (MS)
- Computer Engineering (MS)
- Computer Science (MS)
- Electrical Engineering (MS)
- Engineering Management (MS)
- Environmental Engineering (MS)
- Explosives Engineering (MS)
- Geotechnics (ME)
- Industrial-Organizational Psychology (MS)
- Information Science & Technology (MS)
- Manufacturing Engineering (ME, MS)
- Mechanical Engineering (MS)
- Mining Engineering (MS)
- Systems Engineering (MS)
- Technical Communication (MS)

Doctorate Degrees (PhD/DE) are available on a case-by-case basis. Interested students should contact the corresponding academic department for details.

Graduate certificate programs are a great way to start earning college credit toward a graduate degree.
Missouri University of Science and Technology

Education that Fits.
Civil and Environmental Engineering

Graduate certificates give YOU the opportunity to broaden your knowledge in a particular discipline, learn the latest in developing fields and stay competitive in today's marketplace. By taking a few online courses, you will be able to demonstrate advanced knowledge in the field of civil or environmental engineering.

Online Certificate Programs

- **Contemporary Structural Engineering** - Analysis and design of structural systems; including structural vibrations and stability, advanced steel and concrete design, and using composite materials to strengthen structural systems.

- **Geoenvironmental Engineering** - Design, implementation and management of cost effective site assessment and ground investigation, advanced analysis techniques in soil mechanics and environmental topics.

- **Infrastructure Renewal** - Assessment, repair and rehabilitation techniques with an emphasis on composite materials for infrastructure renewal.

- **Project Engineering and Construction Management** - Construction methods and project management, systems engineering and financial risk management.

- **Geotechnical Earthquake Certificate** - Geotechnical design and consideration of soil dynamic interactions with built structures in geotechnical earthquake engineering.

Online Graduate Degrees

Graduate certificate programs may also be used as a pathway to a graduate degree program. **Credits earned in a certificate program can be counted toward the master’s degree** so long as you earn a B or better in each certificate course. In this case, you can apply for admission to the department’s master’s degree programs without needing to submit GRE scores.

For more information, contact the Department of Civil, Architectural and Environmental Engineering at [ ]. Or go online to learn more at: http://dce.mst.edu/credit/certificates!

For more information, contact the Department of Civil, Architectural and Environmental Engineering at [ ]. Or go online to learn more at: http://dce.mst.edu/credit/certificates!
To submit items to the newsletter…

Please try to get all announcements for placement in the newsletter to the Newsletter Editor by the 20th of the month prior to publication. Items may be sent via e-mail to Jeff Meyer (ASCE newsletter editor) at jameye@stlmsd.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). 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 or via feedback directly from our website. For more information and updates see our Web Page: 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).