As I was researching topics for young engineers, I came across an article describing how to find success in your career, and thought that it might be a good topic for the June president’s message. As I started digging into the topic a little more, what I found applied to more than just new graduates. It applies to many of us. One article gave Ten Tips for Success for Engineering Students, but I personally thought it could be titled Ten Tips for Success, applicable to any of us. The tips included:

1. Identify people who inspire you, and find out what makes them tick;
2. Develop a portfolio of projects;
3. Learn the value of networking;
4. Work in teams as much as you can;
5. Seek informal leadership roles;
6. Find your flaws and fix them;
7. Take a business class;
8. Take design and other humanities classes;
9. Make your summers productive; and
10. Recruit and develop your personal board of directors.

Each one of these tips is excellent advice, not only for new graduating engineering students, but also for us practicing engineers. Some of these tips may seem harder to tackle than others, but it’s important for all of us to remember that ASCE can help with each and every one of the tips! The more effort you put into ASCE, the more you (and your employer!) will gain.

While these tips are valuable for everyone, they’re geared more towards recent graduates, who may not know what options are out there in order for them to take advantage of these tips. But, as I mentioned before, ASCE can help with these steps! Did you know that first year graduates get a free ASCE membership? After the first year, membership fees are tiered based on the number of years out of school the member is. There are also many ways to get involved in ASCE, many that don’t require hours and hours of time. Many roles in ASCE require a commitment of less than an hour a month, and require no previous experience. For professional engineers, there is an added benefit of PDH credits for serving on a professional committee.

If you are interested in getting involved, some of the currently available opportunities include, but are definitely not limited to:

- YMG Social Events Co-Chair;
- SE Branch Director at Large – Student Affairs/Education;
- SE Branch Education Committee Chair;
- SE Branch Public Information Chair;
- WI Section Sustainability Committee Member;
- SE Branch Programs and Meetings Committee Member; and
- SE Branch Membership Committee Member.

Please let me know if you are interested in learning more about any of these positions, or other ways that you can get involved in ASCE!

Sincerely,

Bridget Schuh Henk, P.E., LEED AP

Bridget.Henk@graef-usa.com

Source: http://www.usnews.com/education/blogs/professors-guide/2009/12/02/10-tips-for-success-for-engineering-students-
June Dinner Meeting Announcement

ASCE - SOUTHEAST BRANCH
JUNE DINNER MEETING

UWM Innovation Campus
Presented By John T. McCarthy, P.E.

The University of Wisconsin – Milwaukee (UWM) identified a need during their 2008 Master Planning process for a new campus that would put graduate level engineering in close proximity to the Milwaukee Regional Medical Center. The Northeast Quadrant of the Milwaukee County Grounds offered an excellent opportunity to take advantage of the synergy with the medical complex and develop partnerships between university programs and private industry in a unique setting. The UWM Real Estate Foundation acquired the 88 acre property from Milwaukee County, and worked with the City of Wauwatosa to accomplish rezoning and creation of a Tax Incremental Financing District (TIF) to fund the infrastructure construction. Construction of the main road through the campus, the sewer and water to serve proposed development, and the unique system of bio-filtration basins to manage the site storm water was completed in the fall of 2013. This presentation will discuss the many unique and innovating solutions to the issues encountered during planning, design, and construction of the campus.

John T. McCarthy, P.E., LEED AP, is a Principal with GRAEF-USA Inc. He has been with the firm for 38 years, is currently the leader of the Site Development Team, and is the Technical Practice Leader for Storm Water Management. He is a Project Manager in the Infrastructure Group, in Milwaukee, who specializes in site development and storm water management projects. John received his B.S. in Civil Engineering from Marquette University, and is a registered Professional Engineer in Wisconsin, Illinois, and Virginia. Notable local projects include 12 years on the MMSD’s Water Pollution Abatement Program; and civil engineering design for the Calatrava Addition to the Milwaukee Art Museum, Discovery World at Pier Wisconsin, St. Luke’s Medical Center, Columbia St. Mary’s Hospital, and the Harley Davidson Museum. He is currently leading the civil engineering effort for the Northwestern Mutual Campus Connection project.

Date: Thursday, June 19, 2014

Time: 5:30 pm Social Gathering  
6:00 pm Dinner  
7:00 pm Presentation

Location: Alioto’s Restaurant  
3041 N. Mayfair Road (South of Burleigh)  
Milwaukee, WI 53222

Meal Choices: 9 oz. Filet Mignon, Au Jus, w/Fresh Mushrooms & Baked Potato  
Chicken Cordon Bleu, served with Rice and Carrots  
Salmon, with Baked Potato

Cost: ASCE Members and Guests -- $30  
ASCE Student Members – Free, but must be pre-registered

To make reservations: call Joe Barritt at 608-436-4200 by 4 pm, Monday, June 17, 2014. Leave your name, affiliation, and phone number as well as your meal selection. You may also e-mail the Southeast Branch at ascewise@gmail.com with your reservation. Please make your reservations as early as possible. If you would like to make a payment in advance, please visit the website at www.ascewise.org/events and click on the PayPal link. Make checks payable to ASCE – Southeast Branch.

Please note: No-shows will be billed for the cost of dinner. If you cannot attend, please call by 3:00 p.m. Tuesday June 17th to cancel.
July Tour Announcement

Where do your recyclables go, and what do they become? Tour Wisconsin’s largest recycling processing plant for an inside look at how Waste Management of Wisconsin converts recyclables into feedstock for manufacturers around the globe. Learn how and why this $24 million facility is revolutionizing recycling for Wisconsin households, businesses and institutions.

Please wear long pants and sturdy, closed toe shoes suitable for a manufacturing plant. Personal protection equipment will be provided and must be worn during the tour.

Tour location: W132 N10487 Grant Drive, Germantown WI 53022

Directions: From U.S. Hwy 45, take Exit 51 North at Pilgrim Rd and head right (North) for 1.5 miles. Turn right (East) at Donges Bay Rd and continue for 1.6 miles. After the railroad tracks, look for Grant Dr on your left. Turn left onto Grant Dr., and left at Waste Management’s driveway. Enter the building through the center doors.

Date: Wednesday, July 23, 2014

Time: 4:30 pm Tour
6:00 pm Dinner Social

Social Location: Aldo’s Pizza
W156 N11058 Pilgrim Road
Germantown, WI 53022

Cost*: ASCE Members – Free with advance registration
Non-members - $5

To make reservations: call Joe Barritt at 608-436-4200 by 4 pm, Friday, July 18, 2014. Leave name, affiliation, and phone number. You may also e-mail the Southeast Branch ascewise@gmail.com with your reservation.

Please make your reservations as early as possible. If you would like to make a payment in advance please visit the website at www.ascewise.org/events and click on the PayPal link. Make checks payable to ASCE – Southeast Branch

Please note: No-shows will be billed a fee of $5. If you cannot attend, please call by 3:00 p.m. Monday, July 21st to cancel.

* Dinner is on your own at Aldo’s.
STEM Expo

Editor's note: See promotional flyer mentioned below at the end of the newsletter.

Article By: Ken Mika

Planning for the STEM Expo is underway, with an enthusiastic committee made up of young STEM professionals and students in the area. The Expo is only a short 5 months away, so start getting the word out and plan to spend October 25, 2014 at the Kern Center exploring the fascinating aspects of Science, Technology, Engineering and Math. Please contact Bridget Schuh Henk (Bridget.Henk@graef-usa.com) or Kyle Bareither (kbareither@naturalrt.com) with any questions about the event.

2014 Scholarship Golf Tournament

Article By: Brian Genduso

Thank you to all who have signed up or helped sponsor the 2014 Scholarship Golf Tournament. It is just about a week away on Friday, June 13 at Ironwood Golf Course in Sussex, WI. If you have any questions between now and then, please contact the tournament chair, Paul Koszarek, at paul.koszarek@psiusa.com.

Good luck, and have fun!

Public Information Chair

Article By: Nick Spitzer

There is an open position as the Public Information Chair for the ASCE WI SE Branch Board Public Information Committee. The responsibility that comes with this position is to proofread newsletters before they are distributed to the public, proofread content on the website, coordinate job ads for the newsletter and website, work with the requests that come in from companies and other societies to add events and links to the current website. This is a 2 year commitment that will begin in September 2014. If you are interested in this position, please contact a current board member whom is listed on the ASCE WI SE Branch website.
SE Branch Elections and Bios

It is voting time once again for the SE Branch, including the Younger Member Group. We will be using an electronic voting system using our Constant Contact email distribution service. Watch your emails for instructions in the next week or two. Each of the open positions and biographies of the people hoping to fill the positions are listed below for your reference.

SOUTHEAST BRANCH

President Elect – Jared Wendt, P.E.
Jared is currently serving as a Director-At-Large overseeing the membership and is looking to continue serving the Southeast Branch as a Director-At-Large. Over the past year, Jared has served as the co-chair of the 2012 ASCE Annual Meeting held in Pewaukee last September. He also attended the Region 3 Workshop for Section and Branch Leaders in January. Jared is excited to continue find ways to implement the ideas that he picked up during the workshop. Jared graduated with a B.S. in Civil Engineering from UW-Platteville in 2005 and is registered as a professional engineer in Wisconsin. Jared has worked for CH2M HILL as a project engineer in the transportation group since 2007. Since moving to Milwaukee in 2007, he has been active in various community programs through CH2M HILL. These include the Project Lead the Way Program as a mentor, adopt-a-highway cleanups, future cities judging, and many others.

Secretary – Gerald L. DeMers, P.E.
Jerry has been a solid waste engineer for the Wisconsin Department of Natural Resources for the past year. He is responsible for oversight of closed and existing landfills in southeast Wisconsin, as well as review of the design of proposed landfill expansions. Prior to joining the DNR, Jerry’s career included over 30 years of experience as an environmental consultant with firms located in the Milwaukee area. He has been a project manager for much of that time, and his experience includes stormwater planning and design for railroads, design and construction of new and closure of old landfills, and contaminated soil and groundwater investigations, including Superfund sites. Jerry and his wife Ellen (also an environmental engineer, who met while working together at what is now GRAEF) of 31 years live in Pewaukee, and have two grown children whose careers are teaching youth about science and the environment.

Director at Large, Scholarship – Ken Mika
Ken graduated with a B.S. in Civil Engineering in 2008 and is working on his M.S. in Engineering from the University of Wisconsin – Platteville. After graduating with his B.S., Ken was hired as an environmental engineer for Natural Resource Technology, Inc., an environmental consulting firm headquartered in Milwaukee, Wisconsin. Ken has assisted in YMG events in Milwaukee and Florida, while on a long-term job assignment in the area. In Florida, Ken was on the East Central Florida YMG committee for the Central Florida Field Trip. Most recently Ken served on the 2011 Wisconsin ASCE Spring Technical Conference Committee, Vice President of YMG for 2011-2012, President of YMG for 2013-2013, the planning committee for the 2013 ASCE Central Region Younger Member Conference (CRYMC), and on the planning committee for the 2014 2011 Wisconsin ASCE Spring Technical Conference.

Director at Large, Education - Open

YOUNGER MEMBER GROUP

President – Kyle Bareither
Mr. Kyle Bareither graduated with a B.S. in Environmental Engineering from Michigan Technological University in May of 2007. Since his graduation, Kyle has been practicing environmental consulting with the same employer, Natural Resource Technology, Inc. (NRT), headquartered in Milwaukee, WI. Common responsibilities at NRT include, design, implementation and oversight of environmental
remediation projects. Over the past few years, Kyle has volunteered/assisted in multiple ASCE YMG events in the Milwaukee area in order to bring awareness to the profession in southeast Wisconsin.

Vice-President – Ryan Bowers
Mr. Bowers graduated with a B.S. in Civil Engineering from the University of Wisconsin – Platteville in May 2006 and a M.S. in Civil Engineering from Iowa State University in 2009. He has worked as a structural engineer at GRAEF since 2008 and out of the Milwaukee office since 2011. Ryan has been a member of YMG for the past three years.

Secretary – Justin Flickinger
Justin Flickinger graduated with a B.S. in Civil Engineering from the University of Wisconsin-Milwaukee in December, 2008. He is working towards a Master’s of Science from the University of Wisconsin-Milwaukee and plans on a graduation date of May, 2015. His research focus is in the area of materials engineering, characterizing coal fly ash for use in a multitude of construction materials. He is currently employed as a staff engineer at K. Singh & Associates Inc.

Treasurer – Aaron Schramm
Mr. Schramm graduated with a B.S. in Civil Engineering from the University of Wisconsin – Milwaukee in May, 2010. While at UWM he served as the student chapter President for one year and Vice-President two years. He received the Wisconsin Outstanding Civil Engineering Student Award from the ASCE Wisconsin Section in 2010. He has been employed with exp US Services (Formerly Teng & Associates) since 2011, focusing on both civil design and construction engineering/management.

Co-Outreach Chair – Tony Castle
Mr. Castle graduated with a B.S. in Civil Engineering from the University of Wisconsin – Milwaukee in May 2009 and received a Master’s of Science in Structural Engineering from the Milwaukee School of Engineering in March 2014. He is a Structural Engineer at EMCS, Inc. in Milwaukee WI. Tony has volunteered as an Engineer Mentor for the Future City Competition and is a member of the STEM Expo planning committee.

Co-Outreach Chair – Patrick Flaherty
Mr. Flaherty graduated from the Milwaukee School of Engineering with a B.S. in Architectural Engineering and an M.S. in Structural Engineering. After graduation, Patrick began working as a Project Engineer for Riley Construction Company, Inc. While attending MSOE, Patrick was actively involved with the student chapter of ASCE as a member of the Steel Bridge team and serving as the chapter's President in 2012-2013 and the Outreach Coordinator in 2013-2014.

Co-Social Chair – Josh Mitchell
Mr. Mitchell graduated with a B.S. in Civil Engineering from the University of Wisconsin – Milwaukee in December of 2012, and is currently working towards a Master’s of Science from the University of Wisconsin – Milwaukee. While attending UWM, he was actively involved in the student chapter and served as the chapter’s President. He interned for Patrick Engineering for two years focused on bridge design and roadway construction and currently is a Staff Engineer with Patrick Engineering working in bridge design and construction inspection.

Co-Social Chair – Open

Student Chapter Liaison– Brett Kash
Mr. Kash graduated with a B.S. in Architectural Engineering and a B.S. in Construction Management from the Milwaukee School of Engineering in June 2014. During college, Brett interned with Boldt Construction in the Preconstruction group and as a Field Engineer. Brett is currently employed at Mortenson Construction as a Field Engineer.
Wisconsin PE PDHs needed by July 31

Article By: Brian Genduso

As many of you know, Professional Engineers registered in Wisconsin need 30 continuing education credits every two years. The first biennium will end on July 31 of this year. Because this deadline is coming up quickly, we are reprinting a summary which was compiled by former Branch President, John Tsouflias.

WI PE’s need 30 recorded PDHs/biennium or lose WI PE license...

(30 PDHs = 2 ethics PDHs + 13 interactive presentation PDHs + 15 additional approved PDHs)

Professional Engineers in Wisconsin will be required to obtain 30 approved Professional Development Hours (PDHs) every biennium (2 years) beginning August 1, 2012. The first biennium will end on July 31, 2014. (Exception: New registrants shall not be required to comply with the continuing education requirements for the first renewal of registration) A PDH is a period of 50 minutes of actual instruction or participation in an approved educational activity. PDHs should be rounded down to the nearest half hour and reported in no less than half hour increments.

During each biennium, a minimum of 2 PDHs must be obtained in the area of professional conduct and ethics, and a minimum of 13 PDHs must be obtained via courses where the registrant interacts in real time in a traditional classroom setting, computer conferencing, or video conferencing where participants can interact with each other and the instructor. If a registrant obtains more than 30 PDHs in a biennium, a maximum of 15 of the excess PDHs may roll-over to the next biennium. Roll-over PDHs cannot be used to satisfy the 2 ethics PDH minimum or the 13 interactive course PDH minimum requirements. PDHs can be obtained through the following means:

- Engineering courses at an accredited school or college (semester = 45 PDHs; quarter = 30 PDHs).
- Short courses or tutorials offered through correspondence, DVDs, or the internet.
- Presenting or attending qualifying seminars, technical presentations, conferences, etc.
- PDHs for teaching/instructing a given course for the first time (multiply approved teaching PDHs by a factor of 2).
- Authoring published papers, articles, or books in your area of professional practice (5 PDHs granted in publishing year; 10 PDHs for peer-reviewed journals).
- Actively participating in professional societies (2 PDHs for participation as an officer or committee member per organization per year; maximum 4 PDHs per biennium).
- Attainment of a patent in area of professional practice (10 PDHs per patent).

A professional engineer who fails to meet the continuing education requirements by the renewal date may not engage in the practice of professional engineering until the registration is renewed. The professional engineer section may conduct random audits to ensure compliance. It is the PE’s responsibility to maintain their records as follows:

- Maintain records in a log for a minimum of the 3 most recent biennia.
- Maintain a file of completion certificates or other documents supporting evidence of attendance for all reported PDHs.
- If a course (not a 1 hour presentation) was awarded Continuing Education Units (CEUs), convert CEUs to PDHs on log sheet. (1 CEU = 10 PDH)

Additional details and information can be found in the attached code section: Chapter A-E 13 Continuing Education for Professional Engineers. All engineers should read the 2 page document and understand what is required.
Free Continuing Education Credits from ASCE

Editor’s Note: In light of the article above, here is some information on obtaining free CE credits through ASCE.

As an ASCE member, you have free access to live and archived eLearning Webinars – each a $249 value – that will help you enhance critical career skills in areas including professional and leadership development, technical interests, and many other areas. Developed by experts in their respective fields, ASCE’s live eLearning webinars are held throughout the year, plus many are archived for access at your convenience. Check the schedule and the archive.

http://www.asce.org/Member-Benefits/ASCE-eLearning-Webinars

Other Continuing Education Opportunities

Designing Buildings with Overhead Cranes
Industrial buildings with overhead cranes present a particular set of challenges for the structural designer. The crane manufacturers design the proprietary framing and nonstructural components of the cranes themselves. The design of crane supports, however, belongs to the building structural engineers. These engineers often have many questions about structural requirements for the buildings intended to house overhead cranes. The webinar discusses these and many other practical issues involved in the design of buildings with over-head cranes. It covers the most common types of overhead cranes used in industrial buildings, such as monorails, under-hung cranes, and top-running cranes. For each crane type the instructor discusses the range of the available capacities and the support alternatives for structural-steel and pre-engineered buildings. You will learn about the design criteria for crane runway beams and discover the publicly available software and sources for the design of crane girders, monorail-supporting beams, and stepped columns.

Register at: http://mylearning.asce.org/diweb/catalog/item/id/198152

Advanced Culvert Hydraulics with HEC-RAS
The analysis of culvert hydraulics is a common task faced by engineers working on transportation, land development, and flood control projects. The U.S. Army Corps of Engineers Hydrologic Engineering Center’s HECRAS software program is a widely used tool for various open channel hydraulics analysis and design tasks. One facet of this software package is an implementation of the Federal Highway Administration’s Hydraulic Design of Highway Culverts (HDS-5) document. Although an analysis of the hydraulic effects of a culvert in a channel can be completed with HEC-RAS relatively easily, oftentimes a more in-depth approach is required. The various computation methods and variables involved can produce more than one “correct” answer. Additionally, other factors in the simulation in addition to the culvert structures can affect the hydraulic analysis results. This webinar will take an in-depth look at culvert hydraulics analysis with HEC-RAS. The course will assume that participants have a good understanding of using the HEC-RAS program and the culvert hydraulic analysis features. The webinar will provide a discussion on more complicated culvert analysis issues and provide examples and suggestions on how to tackle difficult culvert analysis problems. Emphasis will be placed on output review to help participants gain a better understanding of reasonableness of HEC-RAS results.

Register at: http://mylearning.asce.org/diweb/catalog/item/id/69041

Newsletter Publication
We welcome your articles, letters & news items for publication in the ASCE SE Branch Newsletter. Advertisements and job postings are also accepted by contacting: Brian Genduso, P.E. – 414.278.9200 – bg@spireengineer.com
Deadline for next issue is the first of the month.
October 25, 2014, 11AM TO 3PM

Milwaukee School of Engineering - Kern Center

1245 North Broadway Avenue, Milwaukee

Discover the world of Science, Technology Engineering and Math at the Exploration Stations at the STEM Expo! Activities are geared for ages 6-18 and include college representatives and volunteers from area college programs as well as STEM professionals. Bring your questions and be prepared to get a little messy!

Exploration Stations include: Build and Race a Rubber Band Car, Concrete Floats, Toy Chemistry, Traffic Trivia, Lego Tower Building and much, much more. Check our website for an updated list of events.

http://www.ascewise.org/stem-expo/

- The first 100 kids to attend will receive a goodie bag of prizes from the sponsors
- Food Trucks will be on site during lunch
- There will also be a raffle for the adults at 2:45

If you are a company looking to get involved in the Exploration Stations, please contact Bridget Henk (Bridget.Henk@graef-usa.com) or Kyle Bareither (kbareither@naturalrt.com) for more information. ASCE is a tax exempt 501(c)3 Non-profit organization.

Sponsored By

[ASCE Wisconsin Section Southeast Branch]

[ASCE Wisconsin Section Younger Member Group]
This is a paid advertisement, and is not affiliated with ASCE.

CAREER OPPORTUNITY

MARCH 2014 MILWAUKEE

CAD TECHNICIAN

Natural Resource Technology, Inc. (NRT) is seeking a qualified CAD Technician to join our Mapping Team. This is a great opportunity to work on environmental remediation projects independently and collaborate with our talented teams of Engineers and Scientists. As a CAD Technician, you will prepare detailed drawings sets for permitting, bidding, construction, and documentation. The ideal candidate will work efficiently with quantity take-offs and site grading. Moreover, the position will be required to manage and communicate project deadlines by working with Project Managers and Administrative staff to complete work on time and on budget.

NRT is an environmental consulting firm serving both private and public sector clients. NRT’s staff includes nationally recognized experts in environmental fields such as: contaminated sediment management, site remediation technologies, and coal combustion product management. Our continuing success is founded on the relationships we build with our clients and on our ability to attract and retain highly talented engineering, scientific, and business professionals with a shared vision: smarter solutions, exceptional service, value.

Essential Position Functions:
- Work closely with Project Engineers and Project Managers to obtain project information and ensure project plan sets and documents are accurate and complete
- Develop drafting and design solutions by preparing maps or engineering drawings through computer aided drafting
- Compile drawing representing various engineering features such as graded terrain, utilities, material stockpiles, open pits, channels, ponds, and other surface features.
- Support cost/quantity estimates and design calculations as requested. May assist in report writing
- Responsible for product quality control and adherence to company CAD standards and procedures
- Utilize problem-solving skills with the ability to identify and present alternative solutions
- Ability to proactively manage schedules and apprise team members on work schedule and status
- Provide technical guidance to project design team for completing environmental and remedial designs and layouts

Preferred Qualifications:
- Comprehensive knowledge of AutoCAD 2012 or later versions preferred
- Knowledge of AutoCAD Civil 3D a plus
- Technical training, Associate or Bachelor Degree in a related area
- MS Office knowledge (Excel required, Access a plus); familiarity with Adobe Acrobat Professional
- Civil/Environmental Engineering experience desired (e.g., grading, utilities, landfills, construction documentation, bid packages)
- Ability to communicate professionally and work with staff in multiple offices to develop and maintain drafting standards

Position: CAD Technician

Position Location: Milwaukee, WI

Position Start: April, 2014

Position Classification: Hourly (Non-Exempt) Full-time

Natural Resource Technology, Inc. is an Equal Opportunity Employer