

VOLUME 46, NUMBER 3 MARCH 21, 2016

IN THIS ISSUE 1. President's Message.....pg 1 2. Directors Message.....pg 2 3. Engineers Week at the Whitaker Center.....pg 3 4. Central PA Engineers Week Council Holds Eventspg 4 5. Students Compete in Capitol Area Science and Engineering Fairpg 5-6 6. 2016 Multi-Regional Leadership Conference Held in Pittsburgh, PApg 7-8 a. Workshop for Section and Branch Leaders.....pg 7 b. Eastern Regional Younger Member Conference.....pg 7 c. Workshop for Student Chapter Leaderspg 8 7. Structural Technical Committee Holds Foundation Design Webinarpg 8 8. February Dinner Meeting.....pg 9 9. Announcements.....pg 10 10. Sponsors.....pg 11 11. News and Events.....pg 12 SECTION OFFICERS **President**

Christopher Smith, PE 717.790.9565 ext 481 cwsmith@modjeski.com

President-Elect

Joe Eberly, PE

Vice President Gary Garbacik, PE

Secretary

Kerry Henneberger, PE 570.323.6603 ext 382 KHenneberger@larsondesigngroup.com

Treasurer

Duke Slifko, PE

Newsletter Editor Jason Taylor, P.G., EIT



President's Message

It has been a very busy month for the Central PA Section. We hosted over 150 attendees between our February and March Dinner Meetings as well as our Geotechnical and Structural Institute lunchtime continuing education events. addition, several of the Section's Board members attended an ASCE leadership conference in Pittsburgh with other members from Sections,

Branches and Student Chapters from many states along the East Coast. We also celebrated Engineers week with events at the Whitaker Center focusing on exposing pre-college students to engineering, a breakfast at Messiah College which featured four student presentations related to their Senior service projects from around the world, the annual awards dinner at the West Shore Country Club and the Capital Area Science and Engineering Fair which recognized outstanding high school students' science and engineering projects. With events like our April Dinner Meeting and Infrastructure Week coming up in May, the next couple months will be equally busy.

I have two questions for you: 1) are you looking to get more involved with the Central PA Section operations and direction for the future? and 2) do you want to develop or further enhance your leadership skills? If the answer to these questions is yes, then this is your opportunity by serving on the ASCE Central Pennsylvania Section Board of Directors. I have been a member of ASCE since college; however, in order to take my involvement in the civil engineering community to the next level it took a simple request from a colleague to join the Board. Over the past 5 years I've had the opportunity to attend 3 leadership conferences where I received invaluable training in both ASCE operations as well as leadership skills that I have applied in my professional career. We currently have several Board of Director positions available for 2016-2017; these positions are listed on the homepage of the Section's website.

Finally, over the past several months, the Section has been working on improving our website in order to better communicate with our members and provide you with the information you need. We are pleased and excited to announce the launch of our new website; it accessed clickina bv on the following http://sections.asce.org/central-pennsylvania/.

> Sincerely Christopher W. Smith, P.E., M.ASCE 2015-2016 Central PA Section President



WELCOME NEW MEMBERS

Je II Lee, PE Caleb Hood, PE Aaron McGintv James Chavanic Joseph Parisi, EIT Robert Krouse, PE Dylan Shannon William Blank, PE Robert De Fiore Gary Sidwell, PE Susan Kotek, PE Harish Roe, PE Paul Moffitt, PE Kenneth Zukauckas, PE Mark Wanger, PE Adam Steininger, PE Jeffery Wert, PE Korah Abraham, PE James Sanchez, PE Zhiyao Shen, PE **Dawn Conniff** Robert Linn, PE Ken Watters, PE Chris Bowers, PE, SE Randy Hoover, PE Jeph Rebert Trey Johnston Justin Leithauser, PE James Echard, PE Bradford Smith. PE Tyler Moyer, PE Kevin Schiefer, PE Chaopeg Shen, Ph. D Ashley Veon Jennifer Trimble, PE Ercan Akkus Curt Dressler, PE Timothy Burkholder, EIT Joseph Nippes **Ahmed Clayiff** Richard Geesaman Reshmi Lai, PE **Daniel Hershey** Elija Marsico Brown Stephanie Velegol James Harris

Carrie Weinhold, EIT

Directors Message

Submitted by: Christopher Menna, P.E. Region 2 Director

Many things are happening in the Region, as my final year of service comes to an end. Over the past few weeks, the Board has met and accomplished the following:

- Successful hosting of 2015 Assembly and evaluation of survey results. The beginnings of negotiations with the 2016 host have also begun.
- Completion of Regional Annual Report
- Implementation and nearly 100% receipt of Section Dues Assessment
- Evaluation, Assessment, and Extension of Solicitation of Governor and Director Candidate for the 2016 Election Ballot
- Expanded and implemented an aggressive visitation cycle throughout the Region to visit as many Student Chapters as possible. The vehicle to do this was a special pilot project variation of the Society's Pizza Party program.
- Intense preparation for 2016 MRLC in Pittsburgh.
- Completed Board training of Higher Logic

As for our geographic entities, we are very proud of the NCS and their recent report card release. We can now say that the Region is now 100% complete in terms Infrastructure Advocacy, where every Section has participated in at least one report card release. The NCS will also be celebrating its Centennial later this year via a number of planned activities. We are also excited to learn about and support our newest Student Chapter, Messiah College in Central Pennsylvania. Our units and members continue to earn various Society awards as well.

In the next few months we hope to accomplish many things such as:

- Successful promotion of Dream Big to our units.
- Visiting as many Sections and Branches as possible and assisting with new Board Installations
- Recognizing and discharging past Governors with thanks, including Tom Imholte of Central Pennsylvania and John Grieshaber of Delaware.
- Ensuring that our Board is whole, with all positions filled, including the newly vacant R2 Younger Member Representative.
- Creating a new R2 website that is more user friendly

On a personal note, I will ensure that our Region has a smooth transition later this year, once our incoming Director is official. I also hope to try one last time to get momentum in reviving Pennsylvania's two dormant Branches – Reading and Erie. Over the past three years, I have visited as many places as possible. I will continue to do this until I am done. Of course, none of this would be possible, without the tireless and passionate support of my Governors. I look forward to helping them become even more successful over the next few months. Be sure to thank them and say hi, when you interact with one of them!



Engineers Week at the Whitaker Center

Submitted by: Bill Kingston, EIT, CFM, Younger Member Group President

On February 20th and 21st, the Whitaker Center's Harsco Science Center hosted their annual Engineers Week Event to introduce engineering concepts to school age children and show them how math and science can be applied to solving real life problems. Each year, members of several local engineering Societies get together and set up activities to supplement the science center's existing permanent displays. This year, participating organizations included the American Society of Civil Engineers (ASCE), the American Institute of Chemical Engineers (AIChE), the American Society of Highway Engineers

(ASHE), the Institute of Electrical and Electronics Engineers (IEEE), the Institute of Packaging Professionals (IoPP), and the American Society of Mechanical Engineers (ASME).





Several members of the ASCE Central PA Section volunteered to help educate children and their parents about the engineering of structures. Volunteers helped facilitate two activities. The first activity involved constructing stacked platforms out of Dixie cups and cardboard squares. The activity aimed to convey the concept of weight distribution and about how something as flimsy as a paper cup could be used to hold a person's weight. Participants laid out arrays of cups on the cardboard squares and then stood on their platforms to load test them. Participants went

through several rounds, each one involving the removal of more cups until the platforms failed. They got to experience just how few cups were necessary to actually hold their weight, if arranged correctly.

The second activity involved constructing towers out of spaghetti, masking tape, string, and marshmallows, with the goal of building as high as possible while being able to support the weight of a large marshmallow on top without buckling. Both children and parents had their go at tower construction, with the highest reaching over 40 inches! Many thanks to all those who helped out and made it such a great event! Be on the lookout for other volunteering activities in the coming year!









Central PA Engineers Week Council Holds Events

Submitted by: Michelle Madzelan, P.E., Director of Member Services

As part of the Central Pennsylvania Engineers Week Council (Council), the ASCE Central PA Section was proud to participate in Engineers Week this year by educating the public and celebrating the invaluable impacts that engineers do to contribute to society! We helped organize and participate in celebrations for engineering achievements and education of the public, along with 14 other engineering societies, as a united front for engineering.

Younger members, section members and life members all volunteered to help young children learn about engineering. The volunteers spent time on Saturday and Sunday of Engineers Week at the Whitaker Center for Science and the Arts. The event shared the wonders of engineering by experimenting with the strength of paper cup towers and the ability of spaghetti to hold up a marshmallow loading. It was both a fun and educational experience for everyone (including the parents who were there).

A new event this year was the first annual Engineers Week Breakfast at Messiah College. Held on Monday morning of Engineers Week, this event combined area professionals with Messiah College engineering students to celebrate engineering together. After breakfast, the students presented four different projects that they are working on to improve problems in third world countries. These projects are part of the learning for their engineering degree.

During the Engineers Week Banquet, the Section was proud to support our Section's Geotechnical Co-Chair, Paul Lewis. He received the 2016 Central Pennsylvania Engineer of the Year Award during the banquet. He beat out the competition with outstanding engineering projects, community involvement and excellent leadership that we all can use as an example of a truly distinguished engineer. We send our congratulations out to Paul for receiving the well-deserved award!

ASCE proudly participated in promoting and celebrating engineering during Engineers Week. Thank you all who volunteered to make this a successful time!



Students Compete in Capitol Area Science and Engineering Fair

Submitted by: Bruce G. Stegman



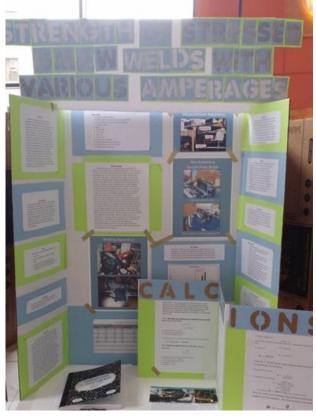
The 2016 Capital Area Science and Engineering Fair (CASEF) was held at the Whitaker Center in Harrisburg on Thursday, February 25th. There were 291 projects, and 348 students from 48 capital area middle schools and junior/senior high schools. One hundred fifty volunteers were on hand to judge the submissions. Of the 13 junior engineering entrees and 10 senior engineering entrees, three (3) were considered particularly outstanding from a civil engineering perspective and subsequently recognized by ASCE Central PA Section.

Senior Category, First Place: \$200 Prize

Laura Benton, Derry Township Hershey High School (SR-EN-019) STRENGTH OF STRESSED GAS METAL ARC WELDS WITH VARIOUS AMPERAGE

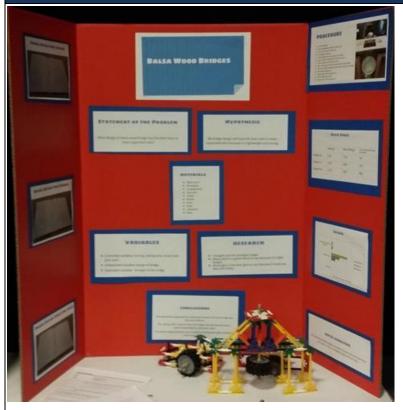
This project investigated the effect of amperage on weld strength and concluded weld penetration is

directly related to weld penetration but also the optimum current for strength.





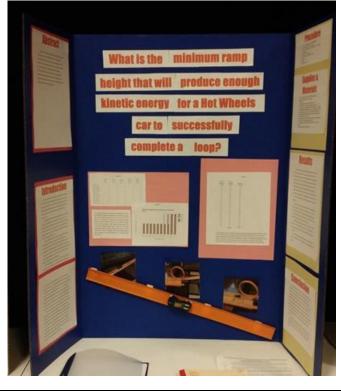




Junior First Place \$200 JR-EN-340

Samuel Corbin, Cumberland Valley Eagle View BALSA WOOD BRIDGES

The project investigated the best bridge mass to mass support ratio by constructing several types of bridges.



Junior Second Place \$100 JR-EN-304

Aniela Lee, Linglestown MS MIMINMUM RAMP HEIGHT

The project investigated the minimum ramp height to produce enough energy for a hot wheels car to successfully complete a loop.

The ASCE Central PA Section sponsored awards were presented on Friday, February 26th by Paul Lewis, Geotechnical Group Co-Chair, at the Whitaker Center's Sunoco Auditorium. Each First Place winner received a check for \$200 and each Second Place winner was awarded \$100. The Senior Grand Champions will attend the International Fair in Phoenix, Arizona in May and the Junior Finalists will enter the National Broadcom Masters National competition. Engineering projects were judged by ASCE Central PA Section representatives Tom Imholte, Laconie Jackson, Janka Ovcharovichova and Bruce G. Stegman.

For more information on the CASEF, visit http://www.casef.org/.



2016 Multi-Regional Leadership Conference Held in Pittsburgh, PA

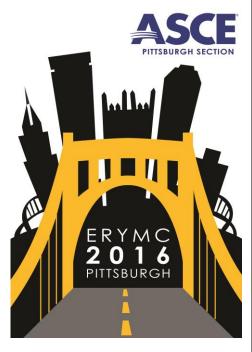
Workshop for Section and Branch Leaders (WSBL)

Submitted by: Gary Garbacik, PE, Vice President

It was a cold and windy night... I'm sure that has started many stories but it was true for this year's Multi-Region Leadership Conference, February 11th and 13th in Pittsburgh. We experienced record cold temperatures with howling winds outside but inside the Omni William Penn Hotel in downtown Pittsburgh there was a lot of heat with a record number of participants and exciting sessions. This year's WSBL had many great speakers and interactive sessions to train the current and future Section and Branch leaders.

This year's conference offered many exciting leadership and educational opportunities. Workshops provided helpful advice on understanding and applying "emotional intelligence," understanding generational differences, and other insights into becoming a great leader. The leadership tools presented at the conference can be used at each level of the Society as well as in the attendees' professional careers. Other breakout sessions included a very informative discussion of the inner workings at the National Society level and how they can assist the Sections as well as a session on Professional manners in the digital world. This session described both manners in the digital world and the differences in the perceptions between different generations.

The conference participants also met President-Elect Norma Jean Mattei, Ph.D, PE, F.SEI, M.COPRI, M.ASCE. She presented a very engaging look into her career and insights. Inspiring us when "tapped on the shoulder" to make the most of the opportunities provided to us.



The feature movie: Dream Big: Engineering Wonders of the World will premier in IMAX Theaters during Engineers Week 2017. Awe inspiring monuments of civil engineering - the Hoover Dam, Golden Gate Bridge and others – will be on display.

Not all of the time spent in Pittsburgh was work though, the entire MRLC (including the Younger Members and the Students attending were treated to a night out at the famous Jerome Bettis 36, a restaurant in North Shore Park near the stadium. Good food and fun was had by all.

Eastern Regional Younger Member Conference (ERYMC)

Submitted by: Bill Kingston, EIT, Younger Member Group President

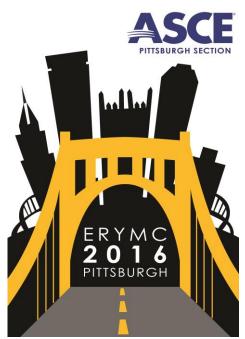
Over the course of the event, Section leadership attended lectures presented by high ranking ASCE National staff (including current President Mark Woodson, PE, LS, D.WRE and Executive Director Thomas Smith, ENV SP, CAE) and Regional leadership on topics pertaining to professional and leadership development. Noteworthy presentations included Professional Ethics by Tara Hoke, Esq., ASCE General Counsel, and What Makes a Leader? by Terry Neimeyer, PE, CEO and Chairman of the Board of KCI Technologies.

In addition to the general MLRC events, ERYMC participants had the chance to learn about the demolition of Pittsburgh's Civic Arena from Harold "Bud" McCutcheon, PE, Chief Engineer, KU Resources, and about how to get involved in Public Policy from Ashley Henry Shook, Director of Grassroots Lobbying, Duane Morris Government Strategies. Younger Member roundtable discussions and regional breakout sessions also allowed participants to share ideas with representatives of other Younger Member Groups (YMG) from across the East Coast and gain insight into ways to strengthen our YMG here in Central PA.



Workshop for Student Chapter Leaders (WSCL)

Jon Winger, EIT (Messiah College Practitioner Advisor)



Student Chapter leaders from across ASCE's eastern region gathered to network and learn about ways that they can improve and engage others in their respective Student Chapters. National level leaders presented aspects of their own career and leadership development and how it coincided with their growth and leadership within ASCE. Attendees came to a new understanding of how professionals benefit from being involved in ASCE. The opportunity to network with students and other Practitioner Advisers was also very helpful.

In addition to the article authors, Section attendees included Joe Eberly, PE, Section President-Elect, Trevor Dombach, EIT, Director of Communications and Practitioner Advisor to the Penn State Harrisburg Student Chapter, Jack Raudenbush, PE, Region 2 Governor. Representatives from Bucknell University, Messiah College, Penn State University Park, and Penn State Harrisburg also represented Central Pennsylvania at the WSCL.

The Section thanks the members who attended for their continued dedication to the society and to the civil engineering profession. Next year's MRLC will be held in Newark, NJ.

Regions 1, 2, 4 and 5 encompasses the New England, Mid Atlantic and many southern states with attendees coming from as far away as Florida, Mississippi and Louisiana.

Structural Technical Committee Holds Foundation Design Webinar

Submitted by: Michael McGowan, P.E.

On Thursday, March 3rd, 24 engineers from 11 companies attended the webinar entitled "Philosophy of Structural Building Codes" presented by Dave K. Adams, P.E., S.E., M.ASCE sponsored by the Structural technical committee/SEI. The webinar was held at Gannett Fleming, Inc. in Camp Hill, PA.

Those in attendance received a refresher on the purpose of codes and why codes have become more complicated. Structural building codes serve a number of purposes, but the primary one is to provide minimum standards of design that protect human health and safety. Codes have grown more complicated over the past 25 years primarily by providing increasing numbers of explicit provisions for the design of most structural members.

The presenter explained the differences between implicit and explicit code provisions and explained why this knowledge is important to structural engineers. Explicit provisions appear to be a good way to encode design knowledge, but too many make the code unwieldly and reduces innovation in design. Design codes will continue to utilize a combination of implicit and explicit provisions that provide general design principles and explicit provisions.

Lunch was provided to all attendees and 1.5 Professional Development Hours (PDHs) were earned.

If you have any questions or comments, or would like to become more involved in the Central PA Section of the ASCE Structural technical committee/Structural Engineering Institute, please contact Mike McGowan at (717) 763-7211 or mmcgowan@gfnet.com.



February Dinner Meeting

Submitted by: Paul Lewis, P.E., Geotechnical Institute Co-Chair

The Central PA Section hosted the February Dinner Meeting on Wednesday, February 10th at the Park Inn by Radisson in Mechanicsburg. The meeting was organized by the Geotechnical Institute and was attended by approximately 65 members and guests.

The meeting was opened by Section President, Mr. Chris Smith. ASCE Region 2 Governor, Mr. Jack Raudenbush recognized and presented Life Member certificates and lapel pins to the following individuals:

Robert Hasemeier, P.E., M.ASCE Edward Buchan, P.E., M.ASCE Jeffrey Evan, P.E., Ph.D, F.ASCE



Pictured from Left to Right: Chris Smith, Life Members Edward Buchan, Robert Hasemeier, Jeffrey Evans and Region 2 Governor Jack Raudenbush

In addition, four other individuals from the Central PA Section became Life Members in 2016, they are Stephen Grimme, Donald Mowery, Raymond Robbins and Robert Grubic. The Section is very proud to have members like these who have dedicated such a large portion of their life to the civil engineering profession.

Unfortunately, our originally scheduled speaker, Dr. Donald Bruce, was unable to attend and deliver his Terzaghi Lecture due to an unforeseen commitment abroad. He did send his deepest regrets and apologies to the Section. For those interested, Dr. Bruce's Terzaghi Lecture is available for viewing on YouTube at: https://www.youtube.com/watch?v=uOx5tmdTeC8.

We were fortunate, however, to have Mr. Roger Adams, Pennsylvania Department of Environmental Protection (DEP), Chief of Dam Safety, join us for the evening and present on the topic of Dams and Dam Safety in Pennsylvania. Roger's career with DEP includes 30+ years with the Dam Safety Program. He has served as the Chief of the Division of Dam Safety and the state representative of the Association of State Dam Safety Officials (ASDSO) since June 2010, and was elected to the ASDSO Board of Directors in September, 2014, where he currently serves as Secretary. As division chief, he directs all aspects of the dam safety program including review and evaluation of plans and specifications for dam construction or rehabilitation, monitoring of dam construction projects, monitoring the operation and maintenance of all regulated dams, and review and approval of emergency action plans for high hazard dams. Mr. Adams also serves on the US Department of Homeland Security's Dams Sector, Government Coordinating Council.



Roger's presentation focused on the different types of dam structures in Pennsylvania and their purpose / function. He also discussed the age of the dams in PA, dam safety concerns and presented various examples of dam rehabilitation. Roger finished his presentation describing the Superstorm Sandy event and the impacts that the intense rainfall had on two dams and to the residents that live downstream.

The Section greatly appreciated Roger's willingness to step in and present to the attendees on such short notice. His presentation certainly raised the awareness of dam safety issues and provided all attendees an opportunity to learn about the many different types of dams that are present in Pennsylvania and their purpose (i.e. water supply, recreation, flood control, etc.)

Pictured from Left to Right: Chris Smith, Roger Adams, Paul Lewis, Tom Imholte (Geotech Institute Co-Chair)







Register Now!

Route 11/15 Rock Slope Safety Improvement

Presented by Mike Keiser, District 8-0 Executive and Mark Malhenzie, Project Manager



Tuesday, March 29, 2016 11:30am-1:30pm

Radisson Hotel Harrisburg 1150 Camp Hill Bypass, Camp Hill, PA 17011

Register by March 25, 2016 at: http://www.wtsevents.org/chapter/Central-Pa/



Thank you to WTS Platinum Level
Corporate Sponsor NTM Engineering for sponsoring this event!



Sponsors





- Automated Monitoring
- Instrument Rentals
- Vibration Monitor Rentals
- Field Services

monitoring services made easy

www.geo-instruments.com

800-477-2506



Upcoming Events

Event	Date	Location
Geotechnical Technical Group Webinar	March 28, 2016	Gannett Fleming West Building
ASCE/WTS Joint Event (11/15 Rock Slope)	March 29, 2016	Radisson Hotel, Camp Hill
Section Meeting (Structural Topic)	April 13, 2016	Details to come
Harrisburg Senators Game and Picnic	May 13, 2016	Details to come
Infrastructure Week (included Legislative Day)	May 16-23	Details to come
Annual Knoebels Picnic	July 30, 2016	Knoebels Amusement Park
ASHE/ASCE/WTS Joint Picnic & Casino Night	August 26, 2016	Detail to come

Please visit http://sections.asce.org/central-pennsylvania/ for more information

Address Change? Questions About ASCE?

If you are an ASCE member, and wish to update your address information, please visit: www.asce.org/myprofile.

If you are a member of ASCE, and have questions, please email them to: centralpa.asce@gmail.com.

Questions about the ASCE Central PA Section Newsletter? Send an email to Jason Taylor, Newsletter Editor, at jtaylor@aegroup-llc.com.