

The Pittsburgh Professional Engineer

A Newsletter Published by:

The Pittsburgh Chapter of the
Pennsylvania Society of Professional Engineers

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April/May 2016

President's Message

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My term as President of the PSPE, Pittsburgh Chapter, is winding down. It's been quite an experience!

I would like to thank the many individuals who have helped me this year, including all of the Pittsburgh Chapter Board Members as well as ESWP's Dave Teorsky, Mike Gaetano, and Cori Weber, and Dot Griffin and Brian Schull from SAI Consulting Engineers.

Although I will no longer serve as President, I do plan to continue my involvement with the Pittsburgh Chapter by assisting with the

newsletter and dinner presentations and recruiting Sustaining Associate Members.

ATTENTION: Are you interested in becoming more involved with the Pittsburgh Chapter of PSPE? Would you like to be on the Board of Directors and become a future Officer? If so, please contact Jennifer Nolan-Kremm at 413.316.3547 or via email at jnolankremm@live.com or me at 412.392.8763 or via email at jlombardi@saiengr.com.

Thursday, June 30, 2016, will be our last event of the 2015-2016 season—the Past Presidents' Reception, Recognition of Apprenticeship Sponsors, and the Induction of our New 2016-2017 Officers. In lieu of a dinner, we will have a social hour with an abundance of hors d'oeuvres. This will allow plenty of time for you to mingle with our past presidents and our new officers and to thank our apprenticeship sponsors. See page 3 for additional information and a reservation form.

Attention all Past Presidents! Meet me at the bar, and I'll buy you a drink to thank you for your past service.

I look forward to seeing you at this last event of my term as President.

Jim Lombardi, PE
President



Joint Meeting of Pittsburgh Chapter PSPE and Three Rivers Chapter of Construction Managers Association of America

On March 24, 2016, the Pittsburgh Chapter of the Pennsylvania Society of Professional Engineers held a joint meeting with the Three Rivers Chapter of the Construction Managers Association of America at the Engineers' Society of Western Pennsylvania. **Mr. James Lombardi, PE**, Pittsburgh PSPE Chapter President, and **Doug Aiken, PE**, CMAA Chapter President, welcomed everyone. Following the dinner provided by the Engineers' Society of Western Pennsylvania, Mr. Lombardi introduced the evening's guest speaker, **Mr. James Foringer, PE**, Assistant District Executive-Construction for District 11 of the Pennsylvania Department of Transportation (see photo).



Mr. Foringer discussed PennDOT's **Hulton Bridge Replacement** project. The original Jonathon Hulton Bridge was the first major bridge designed by Allegheny County. The 1,544-foot-long Parker Pratt thru truss bridge was constructed in 1908 by American Bridge for \$306,000. It spanned the Allegheny River and a heavily used Norfolk Southern rail line.



The contract to replace the bridge was awarded in August 2013 to Brayman Construction Company. The anticipated final contract value for the project is \$66 million. There were many challenges to overcome during construction, including obtaining permitting for dredging of the channel that was not contemplated at the time of bid; a nearby bald eagle nest; the presence of the endangered spotted darter and mussels in the river; coordination with multiple agencies in order to close the navigation channel; and noise and vibration monitoring of nearby residential properties. The project includes 12 million pounds of fabricated structural steel, 2.2 million pounds of rebar, over 15,000 cubic yards of concrete, nearly 1,400 linear feet of 5-foot-diameter drilled shaft caissons, and over 48,000 square feet of architectural surface treatment. In order to erect Span 4 at the center of the river, the structural steel was first erected and braced on barges then lifted into place using strand jacks attached to the previously installed bridge superstructure. After the new bridge was in place and functional, the original bridge was demolished by implosion on January 26, 2016. The project is anticipated to be completed in June—just in time for the U.S. Open.





The Pittsburgh Chapter of the Pennsylvania Society of Professional Engineers

Invites all current and prospective members as well as guests to the
Thursday, June 30, 2016, Meeting

Recognition of Apprenticeship Sponsors Recognition of Past Presidents and Induction of 2016-2017 Chapter Officers

***At the Engineers' Society of Western Pennsylvania Building
337 Fourth Avenue, Pittsburgh, PA 15222***

On Thursday, June 30, 2016, the Pittsburgh Chapter of PSPE will be recognizing the generous sponsors of the Apprenticeship Program and all past Chapter Presidents, followed by the induction of the 2016-2017 Chapter Officers. Without the generosity in time and talent from our Apprenticeship sponsors and their personnel and the wisdom and guidance of our Past Presidents, the Chapter would not be able to achieve its goals.

Abundant Hors d'oeuvres in Lieu of Dinner

**Hors d'oeuvres and Past Presidents Recognition (Cash Bar) – 6:00 pm Social
Presentation of Apprenticeship Sponsors – 7:00 pm
Followed by Induction of Officers by
PSPE's SW Region Vice President, Joseph Boward, PE**

You may make your reservation by completing the form below and mailing or faxing it to Dave Teorsky, ESWP. You may also phone in your information to ESWP. If you choose to make your reservation via email, do not email your credit card information. Payment may be made by calling in your credit card information, faxing this completed form, or mailing this form with credit card information or enclosing a check.

Phone: 412.391.0615 Fax: 412.261.1606 Email: d.teorsky@eswp.com

U.S. Mail: Pittsburgh Chapter PSPE, 337 Fourth Avenue, Pittsburgh, PA 15222

Name: _____ **Phone/Email:** _____

Name: _____ **Phone/Email:** _____

Reservations, including payment, must be received by Friday, June 24, 2016.

Cost per attendee is \$15.00 for PSPE members and their guest and \$20.00 for non-members.

Payment Options:

Credit Card: ___ MASTERCARD ___ VISA ___ AMEX

Card Number: _____ Expiration Date: _____ CVV Code _____

Name (as it appears on credit card): _____

Billing Address: _____

___ Check enclosed payable to "Pittsburgh Chapter PSPE" and mailed to 337 Fourth Avenue address.

Cancellations must be received three (3) days prior to the event.

Engineering Apprenticeship Committee Reports March and April 2016

On March 16, 2016, **AKSteel** in Butler opened its doors to our Apprenticeship program. Most visits take place before Christmas because student activities increase markedly with the arrival of the new year. AKSteel could not accommodate us before Christmas; however, after a few false starts, March 16 was finally selected.

Invitations were sent to the two northernmost groups of students. When only a few apprentices responded, we sent Visit Notices to the remaining three groups. In total, ten Apprentices plus coordinators **David Briskey** and **Reyman Branting** made the visit to AKSteel.

Presentations were made by representatives of the Hot Mill and Safety Departments, who also served as guides through the Hot Mill. A metallurgist explained the hows and whys of electric steel. It is used in transformers, large and small, to reduce energy losses and is rolled to reduce thickness to a fraction of an inch. Grains are reduced in number and increased in size through choice of ingredients and strict temperature control.

While touring the Hot Mill, the Apprentices saw the red-hot steel leave the reheat furnace, rolled to reduce thickness, then coiled for transport to another area to complete the process.

At the March Board meeting, the Apprenticeship Committee was asked to inquire if AK Steel would host a visit by members of the Pittsburgh Chapter. AK Steel indicated they would be pleased to do so. Details are yet to be finalized.



The final meeting of the 2015-2016 school year took place at ESWP on April 13, 2016. Fourteen Apprentices attended, plus Engineering Apprenticeship Committee members **Reyman Branting** and **David Briskey**. The guest speaker was the 2014 Young Engineer of the Year, **Nicholas J. Burdette**, who held the interest of the Apprentices as he related several of his experiences and answered questions posed by the Apprentices.

One of the Apprentices from **North Hills High School**, **Anna Marchese**, participates in her school's technology education department. Her photo appears on the front page of the March 20 *McKnight Journal* and shows her preparing her rocket for launch. Anna spoke about her experience in the North Hills' technical education department. She brought the aforesaid rocket, which had fired successfully and was recovered from an adjacent parking lot. The chapter's Engineering Apprenticeship is but one of several programs designed to acquaint high school students with the field of engineering.

There was a competition among groups, fun activities, a non-pizza lunch, and distribution of Certificates of Participation. It has been said that these Certificates help to create a favorable impression on college admissions offices.

The **Allegheny Intermediate Unit** has reserved a room for the Orientation Meeting scheduled for September 7, 2016. **Ms. Amy Gibbs** of the AIU noted that there is no limit imposed by them or the school districts on the number of allowable visits by the Apprentices. Because each visit is a day out of class, the Apprentices concurred that one visit every three weeks would not overload them with catch-up school assignments. With the number of new hosts acquired in the past couple of years, it may be possible to provide five or six visits rather than three or four visits of years past.

A representative of each host will be invited to the June meeting for a complimentary meal and the presentation of a Certificate of Appreciation for their participation in the Engineering Apprenticeship program for the 2015-2016 school year.



PSPE Mathcounts Coordinator

Do you want a challenging but rewarding position? Do you love to see math and science promoted in our schools and the kids who are the “mathletes” succeed and be rewarded for their efforts? Then, this position is exactly right for you.

From mid-October until early February of the following year, the Mathcounts competition is organized by the PSPE Pittsburgh Chapter Mathcounts Committee. The Chair/Coordinator has some very specific tasks that have to be accomplished in very specific time windows. HOWEVER, there is a wonderful committee of volunteers that support this position and make it all enjoyable.

Some of the tasks of the Mathcounts Coordinator include:

- ☑ Maintaining the school registration database provided by the National Mathcounts organization.
- ☑ Contacting (via email) each Mathcounts coach (one for each school registered) on a periodic basis to “welcome” them to the Pittsburgh competition and give them updated information as things are organized.
- ☑ Ordering trophies, tests, and other materials for competition day. This process is all electronic.
- ☑ Holding committee meetings – usually starting in December – getting the actual competition organized. Making certain all committee members have what they need to do their job. The committee does most of the work here.
- ☑ Working with the A.W. Beattie Career Center to ensure that they have all the information they need to help us host this competition. The A.W. Beattie staff does most of the work here.
- ☑ Setting up the Mathcounts Scoring information – this is supposed to be online with the National website in 2017.

These may seem daunting tasks, but it is so worth the effort. The mathletes that compete every year are the inspiration for this work. Past mathletes who are no longer eligible to compete have returned to participate as volunteers.

If you are interested, please contact **Virginia Dailey** at dailey@ddengr.com. If you would like to just “wet your toes” and assist for a year, that is a wonderful start!



2016-2017 CALENDAR

MEMBERSHIP EVENTS & MEETINGS

Date	Time	Description	Location
June 30, 2016	6:00 - Hors d'oeuvres & Past Presidents' Recognition (Cash Bar) 7:00 – Presentation of Apprenticeship Sponsors Induction of 2016-2017 Officers	Last Event of 2015-2016 Season	ESWP
September 21-24, 2016		PSPE State Conference	Double Tree by Hilton King of Prussia, Pennsylvania
September 2017		PSPE State Conference	Pittsburgh, Pennsylvania

2016 Chapter Officers

President – James J. Lombardi, P.E.	Executive Secretary – Kirk Thompson, P.E.
President-Elect – Jason Esser, P.E.	Treasurer – John Broschious, P.E.
Vice President – Scott P. Sukits, P.E.	Financial Secretary – Reyman Branting, P.E.
State Director – Dave Briskey, P.E.	Immediate Past President – Jennifer Nolan-Kremm, P.E.

2014–2018 Chapter Directors

Kevin Spangler, P.E. – 2014-2016	Melissa M. Fontanese, P.E. – 2016-2018
Ed Telega, P.E. – 2015-2017	

Chapter Committee Chairs

Refresher Course – Matthew Kusic, P.E.	Sustaining Associates – Jennifer Nolan-Kremm, P.E.
Young Members – Jason Esser, P.E.	Web Site Coordinator – Jason Esser, P.E.
Newsletter – James Lombardi, P.E.	MATHCOUNTS Coordinator – Virginia Dailey, P.E.
Archive – John Broschious, P.E.	CLC – Kevin Spangler, P.E./Gary Chodkowski, P.E.
Apprenticeship – Reyman Branting, P.E./Dave Briskey, P.E.	