

The Drawing Board

NSPE-PA

READING CHAPTER
PENNSYLVANIA SOCIETY OF
PROFESSIONAL ENGINEERS

May 2021

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Message from the President

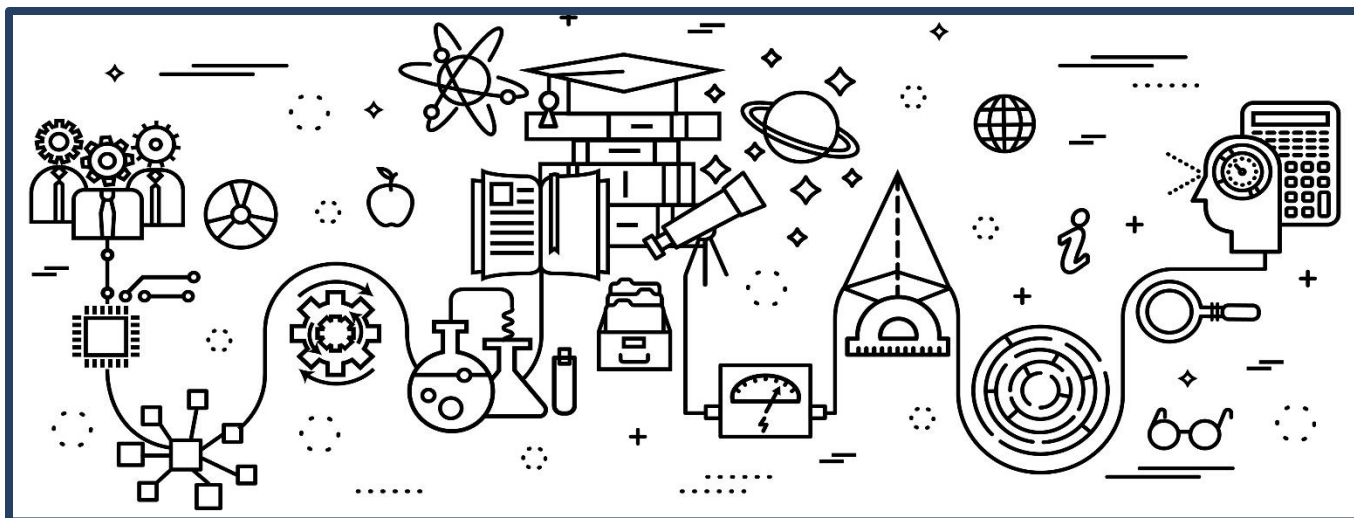
As I read through the last President's Message, which was prepared in early March 2020, it is shocking to me that the pandemic that has dominated all our lives for over a year was the furthest thing from my mind. The message listed the numerous activities that our Chapter participated in, including MathCounts and the Science Fair and spoke of exciting future events including the golf tournament and the NSPE annual conference, which was to be held in Philadelphia. If only I had known then what I know now!

As the weather continues to get warmer and more and more people are getting the vaccine, I find myself more and more optimistic that soon we can return our lives back to "normal". Of course, thanks to technology improvements and many of us being forced to work in a new environment, I am not sure we will ever return to exactly how work was before the pandemic. I for one look forward to spending a day or so working from home (I have loved working from my deck when the weather is nice!)

As you will see in the articles in this newsletter, our Chapter has remained busy. MatchCounts was held this year, virtually. There was one additional round, which was the Invitational. Instead of a team component this year, it was strictly done individually. Congratulations goes out to the five individuals that attended the State competition this year and to their coaches. As with last year, the Science Fair was held virtually. With the experience of last year's competition, interviews were added for 2021 which helped not only the students but also the judges.

Based on the registrations received so far, the annual golf tournament, which was cancelled last year, appears to be one of our best yet! This is great news, since the golf tournament is our primary source of income for events such as MathCounts and the Science Fair. I know for me the ability to get out of the house and see some of my engineering friends is a great motivator! I hope to see you there!





2021 Reading Berks Science and Engineering Fair

The 2021 Reading Berks Science and Engineering Fair was a virtual event again this year as a result of the COVID-19 pandemic. There were no exhibits set up in the Albright Gymnasium nor swarms of students jammed together to explain their projects to the judges. The projects, presentations and interviews were viewed by the judges through the virtual links through their computers.

Two hundred and nine (209) students participated in the event this year, down from the over five hundred in previous years. One hundred eighty-three (183) students participated in the Junior Division (Grades 6 – 8) and twenty-six participated (26) in the Senior Division (Grades 9 -12). The various categories (Physical and Natural Sciences in the Junior Division; and Behavioral and Social Science, Biology, Chemistry, Earth and Environment, Engineering, Math and Computers, Medicine and Health, Physics and Astronomy, and Zoology in the Senior Division) were judged by 65 Category Judges. Also, over 80 Special Awards were provided by various organizations and individuals in addition to the Category Prizes. Thirty-four Special Awards Judges reviewed various segments of the 209 exhibits based on the requirements of the Special Awards.

The exhibits ranged from the simple, how high does the spray from Mentos in Soda spew and how far does a paper airplane fly, to the complex, improvements in ballet toes shows using 3-D printing and utilizing *Wolbachia* as a biological control to suppress *Lycorma delicatula* populations in the United States.

This year's Grand Champion is Holden Rice from Conrad Weiser High School for his project in engineering "The Engineering and Construction of a Large Capacity CNC Router for Inexpensive Computerized Manufacturing".

The Awards Ceremony was held via Facebook Live on April 2, 2021. The award presentations were a Drive-Thru affair at the Ollie's Parking Lot on April 17, 2021. Several of the Special Awards will be presented by the individual organizations at a later date.

The Grand Champion and Champion proceed on to the International Science and Engineering Fair (ISEF) to take place May 16 – 21, 2021. The ISEF is a virtual event.

Grand Champion - The Engineering and Construction of a Large Capacity CNC Router for Inexpensive Computerized Manufacturing

Champion - Utilizing Wolbachia as a Biological Control to Suppress *Lycorma delicatula* (Spotted Lanternfly) Populations in the US

Reserve Champion - Insertion of tph-1 gene in serotonin deficient *Caenorhabditis elegans* using RNA interference and mutant *E. coli*

Grade 8 Champion - Impacts of Various Ocean Salinities on the Desalination Process

Grade 7 Champion - Microplastic Pollution in the Tulpehocken Creek Watershed

Grade 6 Champion - Making Worms Squirm
(decreasing parasitic loads in goats)

If you are interested in judging in next year's RBSEF, feel free to contact Chris Rickert at (610) 507-8751 or christopher.rickert@worley.com.



MathCounts is a competitive program designed to improve and encourage the study of mathematics by junior high school students and is sponsored in part by the Reading Chapter of the PSPE. The 37th annual Berks County MathCounts competition was held virtually in 2021 with an additional round of competitions.

The first round was the Chapter Competition, which was held on February 5th extending to February 6th, allowing students a 24-hour window to complete the 90-minute test. Introduced this year was the Chapter Invitational, which included the top 20% of individuals from the Chapter Competition.

For 2021, the competition was individuals only and there was not a team competition. The Invitational was held on February 25th.

The State Competition, which included the top 5 students from each Chapter, was held on March 25th.

A total of 64 sixth, seventh and eighth grade students representing 10 Berks County schools took part in the Chapter and Invitational Competition.

A hearty congratulations goes out to the top five finishers and their coaches from the Berks Chapter which competed in the State Competition!

1 st Place	Steven Levenson	Boyertown East
2 nd Place	Noah Duffy	Fleetwood
3 rd Place	Adi Nayak	Wilson West
4 th Place	Sindura Sridhar	Wilson Southern
5 th Place	Akina Kizuka	Wilson West

Advertisers



Pennsylvania Society of Professional Engineers
Reading Chapter

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Website Link www.pspe.org/reading

LinkedIn: "Society of Professional Engineers – Reading Chapter"

Off the Board

What is your name and engineering discipline?

Ron Hunsicker, Structural Exam.

Where do you or did you work?

For a quarter century I was employed by Glen-Gery Corporation, a major manufacturer of clay bricks. I'm in private practice now at Ronald J. Hunsicker, P.E.

How long have you worked there or been in business? And what do you do there?

12 years. I do everything; I'm a solo. I specialize in investigations of masonry veneers and masonry.

Any work accomplishments you would like to speak of?

My work with ASTM Committee C12, mortars for masonry, and Committee C15, manufactured masonry units. Being a member of the Masonry Standards Joint Committee, now TMS 402, the committee that develops the "Building Code Requirements for Masonry Structures (TMS402/602)." For 25 years. My work as a member of The Masonry Society's Technical Activities Committee.

Are there other notable employers in your career?

Long, long ago, Spotts, Stevens and McCoy

What is your educational background? What licenses for you have?

Bachelor of Architectural Engineering from Penn State. Licensed in Pennsylvania.

What historical figure do you admire the most?

Winston Churchill

Tell us about your family.

My wife, Jana Barnett, is a lawyer practicing family law in Berks County. My elder son is a professional geologist who is an environmental manager for Norfolk Southern Railroad. My younger son is an industrial engineer in distribution (Think an automated Amazon warehouse, but not Amazon)

What are your hobbies?

Old radios, shortwave listening, toys that make loud noises, cooking, The Pacific War, and science and technology.

What is your favorite quote?

Steven Colbert "I'm not a fan of facts. You see, facts can change, but my opinion will never change, no matter what the facts are."

What is your favorite equation?

$F=ma$

(You can derive all the structural equations from it.)

What is your favorite book?

C.S. Forester's Hornblower and the Atropos. Something that I read as a lad and every few years pull off the shelf and read again. Comfort food.

What cartoon character best describes you?

Calvin's dad.

What trait do you most dislike in others?

Cruelty.

Name something you'd like to learn to do during your lifetime.

Make a good Russian black bread.

What or who inspired you to get into engineering?

My father was a professional engineer who graduated from Penn State.

How long have you been a member of PSPE?

Eleven years.

Any advice for other PSPE members?

Volunteer!

Reading Chapter Board of Directors

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PSPE Reading/Valley Forge Annual Golf Outing

Friday, May 21, 2021

1:00 PM Sharp (Shotgun Start)

Turtle Creek Golf Course

Registration at 11:30 am / 303 W Ridge Pike, Limerick PA

www.turtlecreekgolf.com

Lunch Sponsor (1) \$1,500

- Name (logo) full-page ad in Program
- Signage in picnic grove and Foursome
- Opportunity to speak about your company at lunch

Hole Sponsor and Foursome \$550

- Name (logo) in Program
- Hole Sponsor sign and Foursome

Foursome \$450

Hole Sponsor (No Foursome) \$150

- Name (logo) in Program
- Hole Sponsor Signage

Single Entry Golfer \$135

- We will team you up with others!

Cart Sponsor \$1,000

- Name (logo) 1/2-page ad in Program
- Name on cart signs and Foursome

Beverage Station Sponsor \$500

- Name (logo) 1/2-page ad in Program
- Sign at Beverage Station

Prize Hole Sponsor (4) \$250

- Name (logo) 1/4-page ad in Program
- Hole Sponsor Sign
- Opportunity to present sponsored hole prize(s)

Giveaway Sponsor

Popular giveaways for goodie bags and gift cards for contests are always appreciated. We will gladly provide sponsorship opportunities in exchange for such donations. Sponsorship levels will vary based on the total of the value of item(s) donated. Please contact Michael Fischer if you are interested in making any kind of donation.

All sponsors are encouraged to golf and enjoy the camaraderie in this great event!

Questions?

Contact Michael Fischer, P.E.

mfisher@sitesafe.com

215.205.2130

All proceeds benefit the
Chapters' Scholarship Funds and
MATHCOUNTS programming

PSPE Reading/Valley Forge Annual Golf Outing

Friday, May 21, 2021

1:00 PM Sharp (Shotgun Start)

Turtle Creek Golf Course

Registration at 11:30 am / Buffet Lunch at 12:00 pm

Golfers (Please Print)

E-mail Address

Phone #

1. _____
2. _____
3. _____
4. _____

Non-Golfers or Sponsors

Name/Company (Please Print)

Phone #

Indicate below to designate registration funds for an individual society:

☐ PSPE Reading Chapter

☐ PSPE Valley Forge Chapter

Putting Challenge / Longest Drive / Closet to the Pin

\$135 / Single Golfer

\$450 / Foursome

\$550 / Foursome & Hole

Sponsor

\$35 / Non-Golfer (Lunch Only)

Please Make Checks Payable to:

Valley Forge Chapter PSPE

c/o Jim Thompson, P.E.

801 Ridge Pike, Apt. 3403

Lafayette Hill, PA 19444-1742

All proceeds benefit the: PSPE Reading Chapter Scholarship Fund / MATHCOUNTS & PSPE Valley Forge Chapter Scholarship Fund / MATHCOUNTS

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