UPCOMING PROGRAMS

- June 25 – 27, PDH Boot Camp East, Valley Forge Casino Resort, King of Prussia, PA

PRESIDENT’S MESSAGE

Alfred Gruenke, PE
April 2017

The year is winding down, and my tenure as Chapter President is winding down also. Only a month to go!

The April Board meeting was eventful, since we selected five recipients for our $2,000.00 annual scholarships. We had a banner year for contributions so we can afford to be generous. Many thanks to all of our contributors.

Al Dezubay and Brian Kutz came up with a stellar group of young people. It seems as if the applicants just keep getting better and better. What can one say when SATs approach and sometimes reach 800s? That’s nose bleed territory! Whenever I meet them I have the feeling that our profession is in good hands.

Professional Engineers Day was launched by the National Society of Professional Engineers in 2016 to celebrate and raise awareness of the contributions of licensed professional engineers in the United States. As of 2015, there were 474,777 licensed professional engineers in the U.S. The first Professional Engineers Day was celebrated on August 3, 2016. Eric Tapper had to remind me. This year it’s August 2. The Board discussed options as to how to celebrate. Options are a family picnic, or maybe a golf outing with socializing afterwards. I’m leaning towards a golf outing but am open to other options. Please contact Brian Kutz, the new Chapter President or myself with suggestions. No IronPigs outing, please. We took a financial bath last year.

Continued on page 2
Even though my position as President is over I still plan on being active for a couple of more years. Our mission is too important. I wish the new Officers and the Chapter well.

**Scholarship Awards and Installation of Officers Banquet**

On May 11, our Chapter awarded Scholarships to five bright, young people who are graduating high school and are enrolled in an engineering curriculum in a college or university, and inaugurated a new slate of officers. PSPE President John Nawn attended to do the honors. We were honored to have John participate.

Outgoing President Alfred Gruenke greeted the students, welcoming them to the engineering community. He stated that engineering has had a glorious past, and with people such as these joining the profession it will have a glorious future. The Chapter honors them, and they, by pursuing engineering, honor us.

Alex Dezubay, the chairman of the Scholarship Committee introduced the Scholarship recipients.

**Alana Marie Dee** is graduating from **Parkland High School** and is the daughter of Douglas Dee and Ellen O’Connell. Alana runs cross country and is the captain of her track team, competing in the 100 and 200m dashes, is the third leg of her 4x100 relay, and triple jumps. Alana is a member of the Political Science club, National Honor Society, and Parkland Cares club; and she works at Old Navy. Alana is also involved with her school musical as a build crew member, helps paint the yearly school mural, and plays piano. In her engineering class, Alana is currently working on a design project to limit carcinogen formation while grilling. In the fall, she plans to attend the University of Pittsburgh to study Electrical Engineering.

**Eric Cichocki** is graduating from **Emmaus High School** and is the son of Tom and Gayle Cichocki. He is a National Merit Scholar, a member of National Honor Society and Spanish Honor Society, and an AP Scholar with Honor Award winner. In addition, Eric plays varsity baseball, basketball, and golf at Emmaus High School. He was a captain of the golf and basketball teams and was named the Lehigh Valley Legion Player of the Year for baseball. In addition, Eric earned the Emmaus High School Scholar Athlete for all three sports and was named the Eastern Pennsylvania Conference (EPC) Scholar Athlete for golf. He finished in fourteenth place in the state tournament for golf during his senior year. At Emmaus, Eric is a Hornet Ambassador and serves as a tutor coordinator, and is a member of the EPC Robotics club, and along with Bryce Cavey, led it to receive many awards and reach the Pennsylvania FIRST Tech Challenge State Tournament both years since starting. He also founded Freedom’s Computer Science Club and has participated in various cyber-security competitions. He is a member of National Honors Society, Science Olympiad, Math Team, Freedom’s Environmental Awareness Team, and Future Business Leaders of America. Adam is a Rensselaer Medalist who was nominated for the U.S. Presidential Scholars Program, and he has been awarded AP Scholar with Distinction and National Merit Commended. He plans to attend Rensselaer Polytechnic Institute to major in Computer and Systems Engineering.

**Adam Li** is a graduating senior at **Freedom High School** and the son of Yingqi Lu and Sherman Li. He has involved himself with technology from a young age, building his first computer ten years ago. As a junior, he founded his school’s Robotics club, and along with Bryce Cavey, led it to receive many awards and reach the Pennsylvania FIRST Tech Challenge State Tournament both years since starting. He also founded Freedom’s Computer Science Club and has participated in various cyber-security competitions. He is a member of National Honors Society, Science Olympiad, Math Team, Freedom’s Environmental Awareness Team, and Future Business Leaders of America. Adam is a Rensselaer Medalist who was nominated for the U.S. Presidential Scholars Program, and he has been awarded AP Scholar with Distinction and National Merit Commended. He plans to attend Rensselaer Polytechnic Institute to major in Computer and Systems Engineering.

Continued on page 3
Judson William Freidl is graduating from Freedom High School and is the son of Kerry and Kerri Freidl. Judson is captain of the varsity men's soccer team and his Bethlehem United club soccer team, men's soccer representative for Freedom's Student Athletic Council, and a co-founder of the FIRST Tech Challenge Freedom Robotics team. He also participates in Freedom's Engineering Club, Engineering Academy, Project Lead the Way and National Honor Society while also taking courses at both Lehigh and Lafayette College as part of their High School Scholars Program. He volunteers frequently for New Bethany Ministries, and is a soccer referee/mentor for Eastern PA Youth Soccer. Judson has received numerous academic honors including the Freedom Soccer Scholar Athlete Award, AP Scholar with Distinction, BASF Scholarship Award Winner, Bridges Foundation Award Winner, and was a national finalist in the ACS Chemistry Olympiad. Last summer, Judson participated in the 2016 Lehigh University Summer Engineering Institute for Science and Technology, a four-week collaborative and independent research program focused on the grand challenges of engineering. In the fall, Judson will be attending Cornell University to dual major in Chemical Engineering and Business and Entrepreneurship. While there he also hopes to participate in Engineers Without Borders and perform undergrad research before going on to graduate school.

Bryce Cavey, son of Robert and Kristen Cavey, will be graduating from Freedom High School. He plans to attend Lehigh University and dual major in mechanical or electrical engineering and mathematics. He helped to start, and is one of the leaders of, the Freedom High School robotics team. They compete in the FIRST Tech Challenge competition, team #10771 Le Pamplemousse. He was a member of the varsity football team for four years, winning the Football scholar athlete award for Freedom High School. He participated in a summer honors program at Indiana University of Pennsylvania in which he studied nanochemistry. Bryce is a member of the National Honors Society, the Fellowship of Christian Athletes, and the Math Team. Bryce also participated in the American Chemistry Society Chemistry Olympiad exam. He has received academic awards for Excellence in German, Straight A’s for four years, Rensselaer Medal Finalist, and an Award of Commendation for his work with robotics. In his free time Bryce enjoys freestyle skiing, 3D modeling, and 3D printing.

John Nawn, PSPE President, gave a short talk on the importance of being involved in the political process, so that the proponents of mediocracy do not affect professional licensing. He urged the members to get to know their State Senators and Representatives and remain in contact with them.
**SCHOLARSHIP SPONSORS**

A great way to be involved in the LVPSPE Chapter is to contribute to the LVPSPE SCHOLARSHIP FUND. Please Contact the Valley Engineer Editor to sponsor scholarships for the remainder of the calendar year.

If you would like to contribute in any amount – please send your TAX DEDUCTIBLE donation to PA ENGINEERING FUND. Donations should be mailed to:

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Please note “LVPSPE Scholarship Fund” on the comment line.

Or, you may also contribute via the LVPSPE website [http://www.lvpspe.org/Donations](http://www.lvpspe.org/Donations).

Scholarship application is at [http://www.lvpspe.org/Scholarships](http://www.lvpspe.org/Scholarships). Any questions regarding scholarships can be directed to:

Alex Dezubay, PE  
610-597-2007  
Scholarship@LVPSPE.org

**PSPE SCHOLARSHIPS**
The Pennsylvania Engineering Foundation currently administers the following scholarships for engineering students:

**Undergraduate**
- $1,000 PEF Grant: (two awards)

**Upperclassman**
- $2,000 Pennsylvania Engineering Foundation Grant

Applications and guidelines are on-line now at [http://www.pspe.org/scholarships](http://www.pspe.org/scholarships)

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Alt. State Director
Angelika Forndran, PE  
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Michael F. Basta, PE  
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Board of Direction Meetings

The monthly Board of Direction meetings are 6:00 PM on the second (2nd) Monday of each month. Open to all members; they are held at the office of Barry Isett & Associates, 85 South Route 100, Allentown, PA.

2017 – 2018 Chapter Officers

President:
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President@LVPSPE.org  
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Clover Hill- The Winery on the Hill
Alfred Gruenke PE
Dave Toler PE

A sparse group of LVPSPE members and guests gathered on a chilly and rainy Saturday morning to be educated about grapes, vineyards, and the finer points of imbibing in the fruit of the vine. Clover Hill is a privately-owned company. John Skrip, Jr., a Civil Engineer, and his wife, Pat Skrip, a teacher, purchased land in 1975, and soon became interested in viticulture, the science, production, and study of grapes for wine-making. They still live on the grounds, only a few hundred yards from the winery. Our host, Tina Rauenzahn, told the story of how Clover Hill was so named. John came out of the house one morning and found a four-leaf clover. Pat came out of the house and also found a four-leaf clover. The four-leaf clover has remained the logo ever since. The first few seasons of production, the grapes were sold to other wineries, but in 1985, John appointed Pat as vintner and they went into the wine business altogether, making, bottling and selling wine under the Clover Hill Vineyards & Winery label. Two of their three children, John Skrip III and Kari joined Pat and John, Jr. and today all four own and operate Clover Hill Vineyards & Winery.

Tina Rauenzahn, Event Planner, for Clover Hill Vineyards and Winery in Breinigsville gave the group a tour of the facilities and a short history.

The grape vine is the source of most wine. The name of the wine is often the name of the grape variety. Tina explained that the shale soil and weather in the Lehigh Valley are uniquely suitable for growing grape vines for wine, and were officially recognized, in 2008, as an American Viticultural Area (AVA). The vines are either native, hybrid, or vinifera (derived from European grapes). Clover Hill grows grapes on eighty acres, in six vineyards, four in the Lehigh Valley, including sixteen acres at the winery, and two in neighboring Berks County. New vines are purchased from greenhouses in the Finger Lakes of New York and from California. No wine is produced for the first few years. Shoots are cut off so the strength goes into growing the strong trunk and deep root system. The roots can extend down 25 feet or more. The adult vines are pruned annually, again so the strength is concentrated in the trunk and the grape bunches that will be produced for the new growing season.

In April and early May the vines bloom. In August the red grapes turn purple, and are harvested from late August to mid-October. All pruning and harvesting is by hand. Clover Hill has about 13 full time and 35 total employees, now producing 80,000 gallons of wine per year.

The main scourges are the birds. Sometimes the vines are sprayed for insects, but birds are a bigger problem. Propane cannons are fired to scare the birds, but the effect is limited. The noise stops, and the birds come back. Playing recordings of birds in distress has been the more successful method for controlling birds, along with netting the grapes. Purple grapes are netted to keep birds from eating the grapes or even breaking their skins.

Continued on page 17
To begin the wine making process, the grapes are lightly squeezed by a bladder press. No grape stomping, alá Lucille Ball! Yeast is added to convert the natural sugars in the grape juice to alcohol in stainless steel storage tanks, where it is kept for six weeks to a year. The tanks are able to be temperature controlled, at varying temperatures depending on the stage of the winemaking process and the style of wine, by pumping glycol coolant through passages in the tank walls. White wine comes from either white grapes or red grapes, with the skins and seeds separated from the juice. Red wine comes from red grapes with the skin and seeds remaining in contact with each other for about 5-10 days in the stainless steel tanks. The skins and seeds are separated out after the desired color is obtained, and the wine is filtered prior to bottling.

Wine is aged in white oak barrels to provide “oakiness” or “vanilla.” The aging process can be as short as a few months to a year or more. Wines with acidic structure and tannic acid will age well for many years, softening the tannins, but will eventually decline. People buying a bottle of wine once owned by Thomas Jefferson, for example, are not buying it for the wine, and will never actually drink it. Clover Hill’s wines are made to drink now or age for a few years, depending on the type of wine.

But the essence of wine is not in the mechanics of making it, it’s drinking it. Tina went on to explain the finer points of enjoying wine

The six S’s of enjoying wine:

1. Sight. Look at a glass of wine, appreciate its color and texture.
2. Swirl the wine in a glass to release the aroma and flavor.
3. Sniff in the aroma of the wine.
4. Sip the wine and hold it in your mouth.
5. Swallow the wine.
6. Savor the flavor, especially the aftertaste.

Tina offered four wines to sample, in complementary glasses, along with a description of the unique flavor of each. She also gave recommendations for storing wines, including the shelf life after the bottle is opened.

We thank Tina and Clover Hill Vineyards and Winery for introducing us to the finer points of enjoying one of the finest gifts of nature and human hands.
Minutes for the April 11, 2017 Board of Directors Meeting
6:00 pm at the office of Barry Isett & Associates, 85 S. Route 100, Allentown, PA

Attendees: Al Gruenke, Brian Kutz, Ray Szczucki, Al Dezubay, Mike Basta, Frank Walsh, Angelika Forndran, and Chris Williams

A. Call to Order – Al Gruenke called the meeting to order at 6:00 pm.

B. President – Al Gruenke
   • Clover Hill Winery tour - Saturday April 22nd at 10am.
   • LVPSPE Banquet - Scholarships will be awarded and next year’s officers will be installed on Thursday May 11th.
   • Will send notification on $5 Martin Guitar tour through DVGBC.
   • Not great turnout for IronPigs game last summer, probably won’t do one this year.
   • Could run a golf outing in August. Might be good to send a feeler email to gauge interest.
   • Newsletter has been sent out.

C. Scholarships – Al Dezubay
   • Thanks to a great fundraising effort by Al Gruenke, we have a healthy scholarship fund.
   • Bryce Cavey, Eric Cichocki, Alana Dee, Judson Friedl, and Adam Li to receive scholarships of $2,000 each.
   • Special thanks to Deb at Borton-Lawson for her help with managing the scholarship paperwork.

D. Treasurer – Ray Szczucki
   • Audit is being conducted by Harry Garman. Hopes to be done in a month or so.
   • Ray to come up with budget based on prior year’s expenses, fundraising, PDH income, and dues.

E. State Director – Angelika Forndran
   • Discussed upcoming PDH opportunities.
   • Next state board meeting is on 6/3/17. Kevin will be installed as State Director. Angelika will be installed as alternate State Director.
   • Deadline coming up - PE licenses expire 9/30/2017.

F. Mike Basta
   • NSPE developed a rubric which is intended to help simplify distribution of funds from state to chapters.
   • Mike will be giving his recommendation to the state on the application of the rubric.
G. Old Business
   • LVCPO is holding an event at 4:30 on 5/22. Topic involves the first 100 days of the Trump administration. PSPE sponsorship would cost $250 and all agreed not to sponsor.

H. Adjournment at 6:54 pm on a motion by Al D., seconded by Mike.