



Valley Engineer Newsletter

FALL 2011

UPCOMING PROGRAMS

- Thursday, 29-Sep-11:
Two PDH Continuing Education at DeSales University
- Tuesday, 11-Oct-11:
Tour of LEED Gold Lou Ramos Elementary
- Tuesday, 15-Nov-11:
Tour of LCA Treatment Plant
- Monday, 5-Dec-11:
Annual Holiday Meeting at Hotel Bethlehem



PENNSYLVANIA SOCIETY
OF
PROFESSIONAL ENGINEERS

LEHIGH VALLEY CHAPTER
(ORGANIZED 1935)

CARBON, LEHIGH, MONROE, & NORTHAMPTON COUNTIES

LVPSPE President's Message

Welcome to a new year with the Valley Engineer! The Valley Engineer is published each month from September through May, and keeps PSPE members in touch with what is happening in the Lehigh Valley Chapter.

We had a large turnout at the May dinner meeting. In addition to installing this year's officers, the Lehigh Valley Chapter gave five \$1000 scholarships to deserving high school seniors bound for engineering schools. The Scholarship Committee reviewed dozens of applications from all over the Lehigh Valley. This year's recipients were: Justin Davis from Pen Argyl Area High School, Benjamin Mays from Parkland High School, Michael Hontz from Northwestern Lehigh High School, Victoria Molchany from Parkland High School, and Giovanni Salutti from Freedom High School. Congratulations to these students, their parents, and all of their teachers!

The Program Committee has already scheduled interesting and informative events for 2011! While more information is to come about the event, please reserve the dates on the left in your calendars!

This month the Lehigh Valley Chapter is offering continuing education courses to help you meet your Pennsylvania requirement of 24 PDHs before September 30th. This will be the fourth time our chapter has provided training this year – previous courses have received rave reviews! Scott Ziegenfus, a Senior Applications Engineer with Lutron, will be talking about intelligent buildings and smart homes. Following a buffet dinner, Eric Tappert (PSPE Vice President Northeast Region) will lead an ethics discussion regarding the Quebec bridge. These classes are open to all PEs. **Note:** for those members who have already met this cycle's PDH requirements, you can carry over up to 12 PDHs for the next cycle! Registration for these classes is now open. **Everyone is welcome to audit either or both training sessions (without a PDH certificate) free of charge.**

We are always looking for members to get involved with Chapter activities. Whether you can offer a one-time or ongoing commitment, volunteers like you help make the Chapter's operations run smoothly. Several opportunities are available, including: helping with Mathcounts, reviewing applications as part of the Scholarship Committee, and serving as a Chapter officer. Please contact Al Grunke, LVPSPE Vice President and Editor, if you are interested in giving back to your professional organization!

Regards,

Peter Staffeld, PhD, PE
president@lvpspe.org

Letter from the Editor – Alfred Gruenke PE

Dear Fellow Engineers-

One of the duties of the Vice President of the Lehigh Valley Chapter of the Pennsylvania Society of Professional Engineers is to edit the newsletter of our organization, the Valley Engineer.

I had no idea that this was part of the Vice President's job description. However, such an assignment is no stranger to me. I have written and/or edited my departmental newsletter for years, with some degree of success. Actually, the most difficult part of the job is to cajole others into submitting articles in a timely manner.

Please allow me to tell you something about me.

I have wanted to be an engineer long before I really knew what that meant. I always had a flair for things technical (alá Dilbert), so the seed to be an engineer was planted by some of my teachers when I was a mere lad. However, as fate and circumstances intervened, I did not receive my BSEE until I was 29 years old, from Lafayette College. I passed the EIT when I was 51 and the PE exam at age 52. Desales University awarded me an MBA when I was 66. I guess I am a late bloomer.

I've never worked as a "real" engineer, i.e. as a designer. Instead, I've spent most of my life fixing, installing or otherwise commissioning machinery others have designed. This has taken me to over forty countries, some less desirable as others. Altogether, it has been a grand experience. I now manage the Field Installation Department at F.L. Smidth.

Regardless what I do for a living, I am proud to have the title of Professional Engineer. I've never used my stamp, but the title has helped me when dealing with some European motor and drive manufacturers who supplied equipment with design errors. I had expected flack or a slightly veiled "who are you to question us", but received none. The PE behind my name states to the world that I am competent.

And so we are. We are Engineers. We build things, we create, and we improve the lives of people. It's what we do.

I look forward to be your humble correspondent for the next year. I will try my darnest to make the Valley Engineer interesting and informative. Please help me in this endeavor.

Thank you,

Alfred Gruenke PE

NEW MEMBERS

Lehigh Valley Chapter of PSPE welcomes new members to the Chapter.

Please attend your first dinner meeting at no charge. (Does not include any PDH cost).



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PDH Continuing Education, Thursday, September 29

The Lehigh Valley PSPE is offering two continuing education courses on **Thursday, September 29 at DeSales University** to help you meet your Pennsylvania requirement of 24 PDHs. For those members who have already met the requirements for this renewal cycle, you can carry over up to 12 PDHs for the next cycle! Classes are open to all PEs. Anyone is welcome to audit either or both training sessions (without a PDH certificate) free of charge.

Only those engineers who pre-register will receive a PDH certificate.

Register for the courses by sending an email to pdh@lvpspe.org; please indicate which course(s) you will be attending.

All proceeds go to support the LVPSPE Scholarship Fund and Mathcounts

RSVP by Friday September 23 to
rsvp@lvpspe.org

LOCATION: DeSales University
(check www.desales.edu for driving directions)

COST: \$20 per PDH for PSPE members ; \$30 per PDH for non-PSPE members.

LVPSPE is also offering "PSPE Member pricing" (\$20 per PDH) when five (5) or more engineers register for PDHs from the same company.

6:00 – 6:50 pm: **Intelligent Buildings and Smart Homes:
Protocols, Infrastructure, and Methodology**
Scott Ziegenfus, LEEP AP (1 PDH)

Having all the major systems of a building interact and share information is a major requirement with most owners today. In commercial buildings, it is integrating all the life safety and structural systems from HVAC and lighting to elevators. It is taking class rooms and video conference rooms and making them interactive with the presenter. It is controlling the systems in your house from anywhere in the world. This presentation will give a basic understanding of the different needs and capabilities of integration that allow for less duplication of equipment reducing first costs and better energy savings for the electrical and mechanical engineer. Along with discussion on the benefits of having all building systems talk and work with the same physical infrastructure allows for less structural space required by all the separate systems communications in a building today.

Scott Ziegenfus is a Senior Applications Engineer with Lutron. He is an industry expert in Intelligent Sustainable Buildings and Smart Home; the Educational Programs Chair for the Delaware Valley Chapter of the USGBC, and is a certified LEED Study Guide Facilitator. He serves on ASHRAE standards committees SPC 201 - Facility Smart Grid Information Model and SSPC 135 – BACnet. He is a member of the BACnet International Education Committee and has spoken and presented at numerous prestigious events including, Advanced Energy Leadership Conference – Pennsylvania (keynote), Advanced Energy Conference – State of New York (expert panelist), and Lighting Control/Building Management Systems/Smart Grid Expert – Knowledge Bar, Greenbuild 2010. He has an Electrical Engineering degree from Lafayette College and is a LEED Accredited Professional.

6:50 – 7:30 pm: Buffet Dinner

7:30 – 8:20 pm: **Building a Bridge, the Story of the Quebec Bridge (Ethics)**
Eric Tappert, P.E. (1 PDH)

In 1907, during construction, the twenty-year effort to build a bridge over the Saint Lawrence River at Quebec City appeared to have failed miserably with the partially completed structure collapsing into the river. The death toll was 75 workmen. This seminar covers the history of the bridge, the tale of the engineer who designed it, the fate of the construction company, and finally the successful completion of the project. The primary focus is on the human failures, particularly those of the chief engineer on the project, and the relationship between those failures and the ethical obligations of engineers. This session is approved for 1 PDH in New York.

Eric Tappert, P.E. received a BS degree in electrical engineering from the Moore School of the University of Pennsylvania and a MS degree in telecommunications from the University of Colorado in Boulder. Over the course of his telecommunications career he was employed by Western Electric Company, Bell Laboratories, AT&T Laboratories, AT&T Microelectronics, Lucent Technologies, and most recently by Agere Systems from which he retired in 2001. Since retirement, he has served as a part-time engineering faculty member for Penn State University Berks campus. He is a professional engineer in both Pennsylvania and New Jersey and a life member of NSPE.



Lehigh Valley Chapter
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 (Organized 1895)



ADVERTISEMENTS

Please Contact the Valley Engineer Editor to Advertise for the remainder of the calendar year 2011.

THE GIFT THAT LASTS A LIFETIME – SCHOLARSHIP

A great way to be involved in the LV Chapter is to contribute to the **SCHOLARSHIP ENDOWMENT FUND**. The Scholarship Committee is continually seeking contributions to the Scholarship Endowment Fund. If you would like to contribute in any amount –please see the form on the PSPE website at Lehigh Valley Chapter link – <http://www.pspe.org/scholarships>

Your tax-deductible contribution can be mailed to our Local Scholarship chair:

Roger A. Miller, P.E.
 Borton Lawson Engineering/Arch
 3893 Adler Place, Suite 100
 Bethlehem, PA 18017

Checks should be made out to: “LV Chapter – PSPE”

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



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SCHOLARSHIP OPPORTUNITIES

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

Undergraduate

- \$2,000 PEF Grant
- \$1,000 Harrisburg Chapter PSPE Grant
- \$1,000 Professional Engineers in Private Practice Grant

Upperclassman

- \$2,000 Pennsylvania Engineering Foundation Grant

Applications and guidelines are on-line now at <http://www.pspe.org/scholarships>

Any questions regarding the Scholarship Endowment Fund and Opportunities can be directed to

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Click on the link for the Lehigh Valley Chapter



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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 DeSales University Hurd Science Center 2nd Floor.

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CONET Meeting Announcement for 2011 October 04



TAX STRATEGIES FOR SELF-EMPLOYED CONSULTANTS

Presented by Ron Reed of Bradford and Company, Inc.

Date: Tuesday evening, 2011 October 04

Place: Sheraton University City, 36 & Chestnut Streets, Philadelphia PA 19104
Fairmount/Franklin Suite – downstairs from main lobby

Free Parking: Sheraton indoor garage – entrance on 36th Street.

Take your garage ticket, and have it stamped when you sign in to the meeting.

Networking/Social time: Starts at 5:30 PM

Dinner: 6:15 PM Allow for rush-hour traffic.

Program: 7:00 to 9:00 PM

The IEEE Philadelphia Consultants Network (CONET) is an Affinity Group of the IEEE. Most Members are electrical or computer engineers. The CONET mission is to share knowledge through technical and business networking. Details are on the Web site www.PhilaConet.com.

Open: You do not have to be an IEEE member or a CONET Member to attend this meeting.

Meeting updates will be sent by e-mail: Be sure your current e-mail address is in our records. If in doubt, confirm your current e-mail address to CONET.Phila@IEEE.org.

SHOW AND TELL: Two CONET Members will each demonstrate their 3-minute pitches to prospective clients. The audience will critique both their content and their presentations.

REAL-WORLD PUZZLER: One senior Member will pose a challenging consulting problem taken from the real world. He will respond to questions from the audience but will withhold the actual solution until later in the program.

MAIN SPEAKER: Ron Reed of Bradford and Company, Inc.

- Former Tax Specialist with Price Waterhouse
- Former Vice President of Taxes for a Fortune 500 Company
- Currently a top-rated senior faculty member for the Becker CPA Review Course
- Charter member of the first Toastmaster's public speaking club organized exclusively for professional speakers
- Since 1972 Ron has provided continuing education for CPAs

CONET Meeting Announcement for 2011 October 04, continued

Main Speaker's Abstract: Many of us assume that our accountants take care of our taxes, but we forget that WE are the ones giving them the numbers and records they are using to prepare our tax return. This seminar will identify new deductions that can be used right away to pocket thousands in tax savings. These deductions are based in tax law but presented in simple English that all of us can easily understand. What you will learn:

- Reduce your audit risk - Two easy yet proven strategies
- Determine your true business tax bracket - You will be surprised at the results
- Easily separate your business and personal expenses - This will make your record keeping a breeze
- Keep audit-proof records - Why receipts, invoices, and hand written notes are better than canceled checks and credit card receipts
- Increase your entertainment deductions - Deducting meals and entertainment when you pay only for yourself
- Double your entertainment deductions - How to double your golf, tennis, and other sporting event deductions without spending an extra penny
- Qualify for the new home office rules - These home office rules will turn your home into your principal office and transform personal commuting into deductible business costs
- Double or triple your automobile deductions - Simple strategies that create deductions without you spending more money
- Stimulus package deductions from the recently passed bill which apply to 2011 taxes

Admission, Reservations, and Payment

Admission Fees			
	CONET Members	IEEE Student Members	All Others
A: With Dinner	\$30	\$40	\$40
B: Meeting-Only	Free	Free	\$15

A: With Dinner (All you can eat buffet): Reservations and advance payment are required.

- 1) Reserve by sending an e-mail to CONETtreasury@gmail.com. Include your full name and telephone number.
- 2) You will get an e-mail confirmation with instructions for paying by check or credit card.
- 3) Advance payment is required to reserve space for dinner.
- 4) Payment by check must be received no later than Wednesday, 2011 September 28. The credit card deadline is Friday, 2011 September 30.

B: Meeting-Only: Reservations are preferred. Walk-ins are accepted if space is available.

- 1) Reserve by sending an e-mail to CONET.Phila@IEEE.org. Include your full name and telephone number.
- 2) You will get an e-mail confirmation with instructions for paying by check or credit card.
- 3) Advance payment is not required for meeting-only admission.
- 4) Check or exact cash is accepted at sign-in. (No credit card payment at sign-in.)

Questions about this meeting can be directed to Robert Peruzzi at (610) 462-3939 or by e-mail to Peruzzi@RPeruzzi.com.