



Chicago ASPENEWS



Chicago Regional Chapter of the American Society of Plumbing Engineers
Vol. 44, No. 9
April, 2013

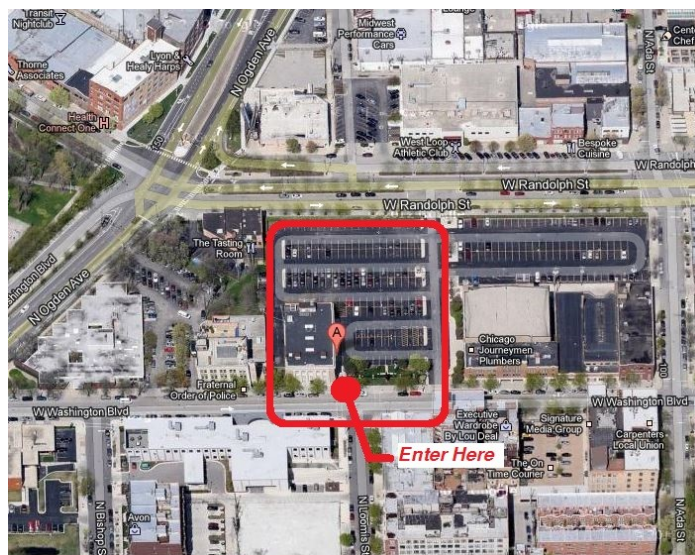


Chicago Chapter General Meeting Thursday April 18, 2013



**Local 130 Plumbers
Training Hall**
1400 W Washington St.
Chicago, IL 60607

**Plenty of FREE Parking to the east of
the training center. Please enter at
the front of the building on
Washington St.**



AGENDA

5:30pm– 6:30pm
Social Hour/Training Hall Tours -
Appetizers

6:30pm:
Dinner, (\$35 ASPE Members with RSVP/\$40 Non-
Members and Walk-ins)

7:15pm:
Program— **"Updates to Lead Free Components in
Plumbing Systems"**
Presenter— K.C. Akalaonu - Moen Commercial



RSVP as soon as possible to Rick Butler, VP Technical!

- ◇ Return the enclosed card for those of you getting this via US Mail
- ◇ Call: 224.238.8515
- ◇ Email: Chicago.ASPE.RSVP@gmail.com

MENU

Catering by Salerno's:

- Caesar Salad
- Chicken Parmigiana
- Baked Mostaccioli
- Sausage Calabrese
- Vesuvio Potatoes
- Selection of drinks



Local Chapters are not authorized to speak for the Society



PRESIDENT'S MESSAGE

Welcome spring!

The fresh spring air is finally here. The etymology of the word April, or *Aprilis* in Latin is uncertain. Perhaps it originated from the verb "aperire", meaning "to open," marking the time when nature resurges and awakens from the long cold winter, and trees and flowers start to bloom, and for some of us, this season couldn't get here soon enough as we look forward to enjoying the great outdoors.

Please read along, we have we have **important** announcements regarding the Product Show, Society's 2014 Convention in Chicago and the upcoming elections. Please take some time to review this information, your Board of Directors works really hard to provide you with plenty of useful information.

ASPE Chicago Product Show – Fall 2013

We are listening to your feedback and suggestions. This is your chapter and we are working hard for the betterment of our Chapter and our Society. The ASPE Chicago Product Show Committee decided to relocate our Product Show from the spring to the fall. There are several aspects being considered and discussed. The most important variable, however, is attendance. We realized our show fell at the end of the exhibition cycle in the spring, by the time our ASPE show arrived exhausted exhibitors and attendees had already been invited and attended a myriad of events throughout the Chicagoland area. The fall will allow us to reach out to a greater and revitalized audience, while avoiding conflicts with parallel events. This decision was the result of a lot of discussion, market analysis and the feedback of attendees and exhibitors. We have a reservation at the White Eagle; however, we are still reviewing quotes from several venues located in Schaumburg, Addison, Oak Brook, Downtown Chicago, and Oakbrook, among others. In addition, we have lined up a graphic designer that will help us develop a new image; this person will assist with flyers, advertising and invitations. We have in mind improving the registration process by offering online registrations and perhaps credit card payments. We have a great team in the Product Show committee, and we invite you to participate in our monthly meetings. There is a lot of work ahead and we need your involvement.

ASPE Chicago Convention

Please mark your calendars for our Society's 50th year anniversary event.

**2014 ASPE Convention and Exposition and Fifty Year Anniversary of ASPE
September 19-24
McCormick Place -Chicago, IL**

2014 Convention Host Committee – Volunteers Needed

We are reviewing the information from previous conventions and developing fundraising plans. Would you like to take part in our upcoming Convention? We need your help. This will be an unforgettable experience, as our City welcomes people from all around the world for the biggest ASPE convention ever. The Convention Host Committee will Host Committee primary responsibility is to be the ongoing liaison with the Society as the Convention planning proceeds. The planning of the Convention is the responsibility of our Society; they will handle booth sales, advertising, and registrations among other things. The Host Committee will help Society staff with local arrangements and will recruit volunteers. Also, we will be raising funds to support our volunteers and spouse gifts, and will be reaching out to our loyal affiliates for delegate mementos.

Manufacturer Spotlight Program – Now Receiving Applications

We are looking for new ways to better serve you and at the same time raise funds for the 2014 ASPE Chicago Convention Host Committee, the board of directors established the Manufacturer Spotlight Program. Attached to this newsletter please find our 2013-2014 ASPE Convention Sponsorship Program.

....continued on next page...

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<https://www.facebook.com/groups/ASPE.Chicago/>

LINKEDIN

[www.linkedin.com/groups?
home=&gid=2393408](http://www.linkedin.com/groups?home=&gid=2393408)

PRESIDENT'S MESSAGE CONTINUED...

ASPE Chicago Chapter Elections – May 16, 2013

April also marks our last meeting before election night. Each Chapter officer is elected for a one year period, and traditionally is requested that they run again in the same positions for another year. Our two years are almost over, and we are very proud of our achievements and are currently preparing for a smooth transition. I would like to remind you that all positions are open according to the bylaws. Therefore, if you want to run for a board position, please email me at fxs@grummanbutkus.com or call me at 847.316.9251 by Friday, May 13, 2013. This will allow us to include your name in the election ballot. This is a great chapter and we need your assistance.

ASPE Badges

Don't forget that you can still get your ASPE Chicago Badges; a custom badge will cost you \$30 and additional \$5 for shipping and handling. Please email Joe Ficek at jff@grummanbutkus.com or give him a call at 847.316.9222. Also, we will be creating an online order form in the coming weeks, you will be able to pay by using PayPal or your credit card.

Second ASPE Chicago Family Picnic

Last year we had a great time. It was a bright sunny day, with plenty of good food, refreshing beverages, fun games and good music. Therefore, the board of directors decided to continue with this -hopefully a new tradition- this year. We are a society of colleagues, business competitors, but more importantly, we develop long lasting networks and friendships. Let's loosen our ties, leave the shop talk behind for a while, and enjoy a sunny day in the company of family and friends at the Chicago Family Picnic. John Nieman is the Chairman and we will be providing more information in the upcoming weeks.

Please mark your calendars for our second family event and save the date.

**Second ASPE Family Picnic
Saturday, August 10, 2013 - Schiller Woods, Groove # 12**

Frank Sanchez, CPD; President

fxs@grummanbutkus.com; 847.316.9251



AFFILIATE LIASONS

Well the Product show is not next month like in previous years to report. But that does not mean you should not be writing to the board with some suggestions or your requests.

We have a new date in September of 2013. We are still working on a new venue which we are hoping to have some definite places to choose from very soon. So your input is still needed.

We want to continue with the tradition of the Chicago ASPE Chapter Product Show to be one of the best in our industry. So please participate and if you have any questions, please feel free to drop me an email.

The next Product show meeting is in April on the 11th Thursday @ 6:00 PM.

Location: Lochinvar Elk Grove Village Facility
801 Chase Ave. Unit E
Elk Grove Village, IL, 60007

Mick Bradford and Nevo Martelli, Affiliate Liaisons

mickb@herkowskisalessales.com; 630.688.2635

nevomartelli@comcast.net



VICE PRESIDENT, TECHNICAL: TECHNICALLY SPEAKING

March Meeting Recap:

Although, due to other industry events, the March meeting attendance was not as high as usual– the presentation was very informative and the corned beef was fabulous!

Tom Reynolds, Service Manager, Artec Environmental gave a very impressive presentation on Medical Gas Systems. He also included code updates, and application scenarios. Mr. Reynolds was extremely knowledgeable of medical gas systems and was able to give a unique perspective coming from the service side of the business.

April's Meeting (Reminder: Product Show Has Been Moved to September)

We are going to the Local 130 Plumbers Training Facility. It is located due west of the actual Plumbers Hall. There is plenty of free parking in between the two facilities.

Public transportation: Madison Bus (#20), one block south of Washington. Exit at the Loomis stop

From 5:30 to 6:30, there will be 15 minute tours of the facility. This will give one an idea of how well the apprentice plumbers are trained, in the classroom and in the labs.

The Presentation for the evening will be on lead free fixtures in the plumbing industry.

The presentation will cover:

- The Law and Background
- Manufacturing Issues
- Installation
- Preparing for the Law

The Speaker is K.C. Akalaonu. He is a Moen Commercial Territory Manager with over six years of experience assisting plumbing engineers, mechanical contractors, and builders meet their plumbing specification needs on a wide-variety of projects.

Mr. Akalaonu holds a B.S.B.A in both Accounting and Economics. He is an active member of ASPE Chicago Chapter and an AIA/ASID Industry Partner. He is also a certified AIA/ASID CEU presenter for Moen Incorporated. This should be a very interesting presentation since it affects all of us.

Call for Presenters

We are looking for new and interesting presentations for the upcoming dinner meetings this fall season. In addition, we will require presentations for the product show in September 2013. If you have presentations that are Illinois State (IPH) approved already it would help a great deal. Please forward your request to rbutler@lochinvar.com for consideration.

Rick Butler, Vice President, Technical

rbutler@lochinvar.com; 224 238.8515



VICE PRESIDENT, MEMBERSHIP

Congratulations! I'm pleased to announce that we're # 1!

That's right, Chicago is the largest ASPE Chapter at 323 Members (Boston is # 2 at 294 Members). In fact, just last month we added another 13 New Members.

Chicago also has a highly educated and talented Membership. We have 52 Members with CPD status (again # 1) and a very respectable, 55 Members with PE's (# 2, but we work harder).

Congratulations Chicago! Your # 1.

Mark Kaulas, Vice President, Membership

mkaulas@bornquist.com



VICE PRESIDENT, LEGISLATIVE

Hello again from your V.P Legislative,

First I would like to congratulate the winner of the March contest: David Erickson with Symmons! He was the winner of a strip of raffle tickets into the monthly meeting 50/50 raffle drawing. Who will be this month's winner?

April Contest

The April question is: Who was the first President of the ASPE Chicago Chapter?

Send you answers to me at mmannarelli@henneman.com. The winner will receive a free strip of raffle tickets at the April meeting.

EPA Changes in 2013

There are 4 major changes to EPA regulations that will take place this year:

1. The EPA must periodically publish this list of contaminants (called the Contaminant Candidate List or CCL) and decide whether to regulate at least five or more contaminants on the list (called Regulatory Determinations) every five years. In the middle of this year the EPA is planning to publish the draft Regulatory Determinations based on CCL3 which is required by the Safe Drinking Water Act.
2. This fall the long term Lead and Copper Rule (LCR) revisions are scheduled to be proposed. These revisions will cover a large range of sampling and compliance issues that will impact a number of utilities just to mention a few below:
 - Sample site collection criteria
 - Lead sampling protocol
 - Public education and awareness for lead issues with new plumbing fixtures
 - Implementation of the reduction of lead in Drinking Water Act of 2011
3. Also, the fall we will see the proposal for a cVOC rule (carcinogenic volatile organic compound) which deals with grouping of contaminants from the EPA's 2010 Drinking Water Strategy. This will pose a challenge due to the many different methods for water treatment.
4. By the end of 2013 the EPA is proposing the perchlorate regulation which is another contaminant. The EPA has determined that it is comparable to nitrosamines.

Rainwater Harvesting Update

Rainwater harvesting is growing in the United States and the government is considering legalization of catchment. Please refer to the site below with regards to individual states and rainwater harvesting statutes, programs and legislation: <http://www.ncsl.org>

Chicago Water Infrastructure

Did you know that the City of Chicago has one of the oldest water systems in the nation?! Approximately 900 miles of the 4,230 mile network are a century old; 400 miles of pipe were installed prior to 1890 and some water pipes were installed when Ulysses S. Grant was President and a year prior to the Great Chicago Fire. With the deterioration of the current pipe mains the City of Chicago has taken out a long term loan that will be used to replace 88 miles of water main piping each year for the next decade! Now that's a lot of pipe!

A brief reminder that this year's product show will be held in September and not in April as it was in years past. We hope to see you there!

Mark G. Mannarelli, Vice President, Legislative
mmannarelli@henneman.com



ADMINISTRATIVE SECRETARY

Hey It is April – is your income tax declaration ready?

The March Chicago Chapter Meeting had a very interesting presentation. "Components of Medical Gas Systems" Presented by Ross Williams from ARTEC Environmental.

Here is some additional basic information:

Pipe Labeling: Pipes should be labeled every 20 feet, once in each room minimum, at each side of every wall penetration, and at each floor level. Pipe should be colored according to the following chart:

PIPED GAS	TEXT COLOR	BACKGROUD COLOR	EXAMPLE
CARBON DIOXIDE	WHITE	GRAY	CARBON DIOXIDE
HELIUM	WHITE	BROWN	HELIUM
MEDICAL AIR	BLACK	YELLOW	MEDICAL AIR
MEDICAL VACUUM	BLACK	WHITE	MEDICAL VACUUM
NITROGEN	WHITE	BLACK	NITROGEN
NITROUS OXIDE	WHITE	BLUE	NITROUS OXIDE
OXYGEN	WHITE	GREEN	OXYGEN
CYCLOPROPANE	WHITE	ORANGE	CYCLOPROPANE
WASTE ANESTHETIC GAS DISPOSAL	WHITE	PURPLE	WAGD
DENTAL AIR	BLACK	YELLOW/WHITE DIAGONAL STRIPES	
DENTAL VACUUM	BLACK	BLACK/WHITE DIAGONAL STRIPES	

Most of the gases require a pressure between 50 & 55 psi except for nitrogen which requires 160 to 185 psi. and Vacuum that is a suction measurement of 15 to 30 inches of mercury (inHg or "Hg).

Piping for air or gases: The piping is hard-drawn, seamless Type K or L copper tube, cleaned and capped for medical services (ASTM B819). For vacuum or WAGD, the piping is hard-drawn, seamless Type K, L, or M copper tube (ASTM B88), the same as for air or gases, or stainless steel tube. For Level 3 vacuum systems, Schedule 40 wall PVC plastic piping may be used.

Pipe Joints: Pipe joints should be brazed with a brazing alloy with a melt temperature in excess of 1,000°F, using a nitrogen NF purge gas. Following are specific requirements identified in NFPA 99. Alternative pipe joints include welded joints following the specific requirements identified in NFPA 99; memory metal couplings; listed or approved metallic gas tube fitting that, when made up, provide a permanent joint having the mechanical, thermal, and sealing integrity of a brazed joint; dielectric fittings and axially swaged elastic strain preload flings.

For Level 3 vacuum systems using PVC plastic piping, solvent cemented joints in accordance with ASTM D2855 shall be used.

The free dinner raffle winner was:

David Erickson From Symmons Industries, Inc.

The 50/50 raffle winner was:

Travis McKnight, form GeSafety (Guardian Equipment)

This month the Chicago Chapter will donated \$100.00 to: Shriners Hospitals for Children

Shriners Hospitals for Children® is a health care system of 22 hospitals providing specialty pediatric care, innovative and research. Shriners Hospitals for Children® provides care for thousands of kids with orthopaedic conditions, burns, spinal cord injuries, and cleft lip and palate, in a family-centered environment with no financial obligation to patients or families.



Shriners Hospitals
for Children®

J. Francisco DeHoyos, Administrative Secretary

FDeHoyos@dbhms.com; 773.732.1150



GUEST COLUMNIST

Pumping Basics - Pumping Practices

Parallel vs. Series

It is important that we remember the difference between arranging pumps in a parallel fashion and a series configuration. The main functions of the pump that we are considering at this time are the output. This is represented by *flow* and *head*. Flow is the rate of water delivery in terms of gallons per minute (GPM). Head is the force that we have to overcome to get the water to its delivery point. This can be represented in feet of head, or it can also be converted to pressure, as pounds per square inch (PSI).

PSI vs. Feet of Head

$$\text{Head in Feet} = \text{PSI} \times \text{Sp. Gr.} \times 2.31$$

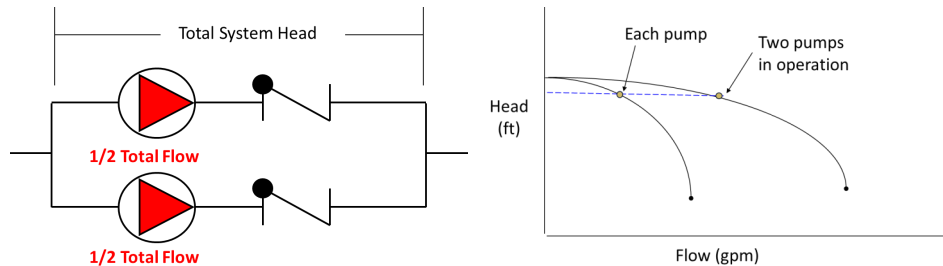
[Sp.Gr. = Specific Gravity; Specific Gravity is the heaviness of a substance compared to that of water, and is expressed without limits]

$$\text{PSI} \times \text{Sp. Gr.} = \text{Head in Feet} \times .433$$

When we have more than one pump working together as a system, the resulting performance of the system, will vary depending on how we connect the pumps together.

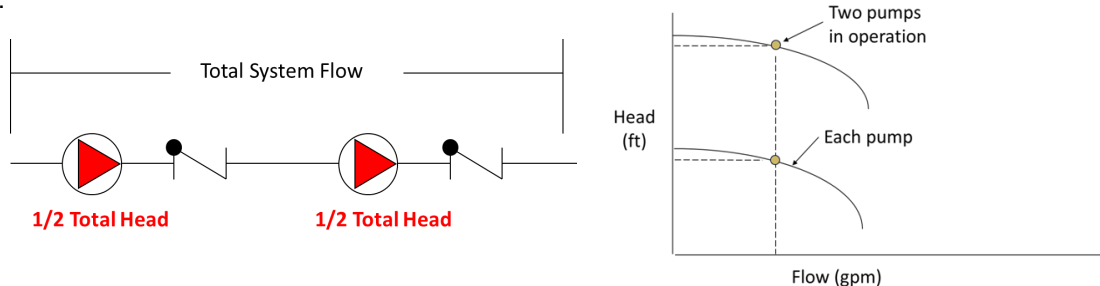
Parallel Pump Selection

When we arrange the pumps in **PARALLEL**, the **FLOW** is added but the **HEAD**, or pressure, stays the same. Look at the pump curves below.



Series Pump Selection

When we arrange the pumps in **SERIES**, the **HEAD** is added but the **FLOW** stays the same. Look at the pump curves below.



One way to remember this is to use a trick like making an acronym:

SHPF
SERIES = ADD HEAD
PARALLEL = ADD FLOW

SHPF = SHEEP HAVE PRETTY FACES



I like something silly but you may prefer something else. You can change it to whatever works for you! Thanks for reading.

Schrodinger's Cat, CPD LEED-AP BD+C, ARCSA-AP
 Mystery Member

March Meeting Attendance

The following individuals attended the March 2013 meeting of the ASPE Chicago Chapter. In accordance with ASPE Society policy, these individuals are entitled to **0.75 RU's** toward the required 24 RU's needed every two years to maintain CPD registration. Meeting attendance is also recognized by the Illinois Department of Professional Regulation to count as 1 PDH towards the required 30 PDH's needed every two years to renew Professional Engineering licenses.

Andy Dailey	David Lehman	Joe Dinkel	Otton Finiewicz
Bryan Fonseca	Didier Vargas	John Nieman	Phill Kroll
Chris Montador	E.J. Kedzie	John Santi	Rick Butler
Chris Rohan	Ed Lichner	KC Akalaome	Ross Williams
Dan Courtney	Elizabeth Mullin	Keith Seier	Steve Montgomery
Dan Curtis	Frank Sanchez	Ken Cutler	Terry Pappas
Dan Patt	Francisco DeHoyos	Luciana Kayo	Theresa Allen
Darren McCuaig	George Pagach	Mark Mannarelli	Tom Higgins
David DeBord	Jim Lagina	Mel Withrow	Tom Renolds
David Erickson	Jingyu Lee	Natalie Ahrens	Tont Daugina
			Travis McKnight

ASPE IIT Student Chapter News

Mr. David Debord Speaks at ASPE IIT Student Chapter!

Mr. David Debord, a senior plumbing engineer from dbHMS, was a guest speaker of ASPE-IIT student on March 26th at IIT main campus. Mr. Debord discussed what is meant to be a “plumbing engineer” and the need for all disciplines to work together as a team. He also gave insights on the importance of sustainability and what current employers are looking for in the industry. We had a great turnout with 26 students and best of all—students gained great knowledge and interest in plumbing engineering. Thank you, David!

Our student chapter is always looking for guest speakers from plumbing industry professionals. IIT main campus is 10 minutes from downtown Chicago, and we have 40 general body members. IIT chapter would love to learn about your experience and expertise in plumbing industry. If you are interested in being a guest speaker, please contact aspe.illinoistech@gmail.com.

ASPE-IIT's next general body meeting is on April 9th, 2013 at Engineering 1 Auditorium, 3300 S Federal Street Chicago, Illinois 60616. Feel free to join us!





INDUSTRY NEWS

Just another friendly reminder, the ASPE Product Show has been moved from this April to September. More information will be posted when the venue is selected. If there is an organization you would like me to contact, please send me an e-mail at kseier@esdglobal.com.

American Society of Sanitary Engineering (ASSE)

(<http://www.asse-plumbing.org/calendar.html>)

ASSE 2013 Mid-year Meeting

Dates: April 17-20

Location: TBD, Cleveland, OH

Details: <http://www.asse-plumbing.org/calendar.html>

National Fire Protection Association (NFPA)

(www.nfpa.org)

NFPA Fire and Life Safety Conference 2013

Dates: June 10-13

Location: Chicago, IL—McCormick Place

Details: <http://www.nfpa.org/itemDetail.asp?categoryID=943&itemID=22735&URL=Training/Events%20calendar>

NFPA Training throughout the US.

<http://www.nfpa.org/itemDetail.asp?categoryID=943&itemID=22735&URL=Training/Events%20calendar>

Society of Fire Protection Engineers (SFPE)

(www.chicagosfpe.org)

Corned Beef and Cabbage Dinner

Date: Thursday, April 18

Time: 5:00pm to 10:00

Location: Berwyn VFW Hall, 1529 South Harlem Ave., Berwyn, IL 60402

Cost: \$40, (\$45 after 4/15)

Details: <http://www.chicagosfpe.org/2013CB&C.pdf>

IBPA Golf Invitational

Date: Tuesday, June 25

Time: TBD

Location: Willow Crest Golf Club, Oak Brook, IL

Cost: \$395/person

Details: <http://www.ilburnpreventionassoc.com/>

PAMCANI

(www.pamcani.org)

PAMCANI's industry-wide calendar:

<http://www.pamcani.org/calendar/>

Illinois Fire Prevention Association (IFPA)

(www.ifpanet.org)

IFPA April Meeting

Date: Tuesday, April 9

Time: 6:00 pm

Location: TBD

Details: <http://www.ifpanet.org/>

Illinois Association of Plumbing-Heating-Cooling Contractors (ILPHCC)

(www.ilphcc.com)

Illinois PHCC 120th Annual Convention

Dates: June 13-15

Location: Marriott Bloomington-Normal, Normal IL

Details: <http://www.ilphcc.com/>

Illinois Chapter of ASHRAE

(www.illinoisashrae.org)

Indoor Air Quality (IAQ) Guidelines and Best Practices

Date: Tuesday, April 9

Time: 2:30-8:00

Location: Aramark, 2300 Warrenville Road, Downers Grove, IL 60515

Cost: \$45 Member, \$50 Non-member

Details: <http://www.illinoisashrae.org/>

USGBC – Illinois Chapter (LEED)

(www.usgbc-illinois.org)

Events Calendar (Hyperlink)

Refrigeration Service Engineer's Society (RSER)

(www.rses.net)

April Meeting – Rooftops – Setting up for Summer

Date: Tuesday April

Time: 7:00

Location: The O'Hare Center, Rosemont, IL.

Details: Basic Clean & Check on rooftops; setting up for summer mode presented by Terrence T. Brandt, Educational Director, RSER Chicago Chapter. Free Parking, Free Admission.

American Society of Professional Estimators

(www.aspechicago.org)

April Meeting

Date: Thursday April 18

Time: 5:30pm

Location: Brio Tuscan Grill

Details: <http://www.aspechicago.org/html/events.html>

May Meeting

Date: Thursday May 16

Time: 5:30pm

Location: Brio Tuscan Grill

Details: <http://www.aspechicago.org/html/events.html>

Keith Seier, Corresponding Secretary

kseier@esdglobal.com; 312 456.2338



Chicago ASPENews



2012-2013 ASPE Chicago Meeting Schedule

Date	Primer	Technical Session	Location
September 20, 2012	Phoenix	Waste Water Recycling - Success Stories from Down Under by Phoenix/Aquacell Water Recycling Solutions	Westwood Tavern & Tap 1385 N. Meacham Rd Schaumburg, IL
October 18, 2012	Thermoplastics for use in Acid Waste Drainage and High Purity Water Systems by IPEX with New-Tech Marketing		La Villa Restaurant 3632 N Pulaski Rd Chicago, IL
October 27-31	2012 ASPE Convention and Exposition October 27—31		Charlotte Convention Center, Charlotte, NC
November 15, 2012 <i>One Hour of IL State CEUs Provided</i>	Viega	Keeping on the right side of State & Local Plumbing Codes by Jim Majerowicz of Local 130	Parthenon 314 S Halsted St Chicago, IL
December 20, 2012	ASPE Chicago Chapter Booster Night and Holiday Celebration		La Villa Restaurant 3632 N Pulaski Rd Chicago, IL
January 17, 2013	The Basics of Geothermal, Including Hybrid Systems by Scott Hackel of The Energy Center of Wisconsin		Parthenon 314 S Halsted St Chicago, IL
February 21, 2013 <i>One Hour of IL State CEUs Provided</i>	Indirect Water Heater Systems for Domestic Applications by Mark Kaulas of Bornquist		Venuti's 2251 W. Lake Street Addison, IL
March 21, 2013	Available	Components of Medical Gas Systems by Ross Williams of ARTEC	La Villa Restaurant 3632 N Pulaski Rd Chicago, IL
April 18, 2013	Updates to Lead Free Plumbing	Local 130 Tour	Plumber's Training Hall Local 130 1400 W Washington
May 16, 2013	Water Quality Association	High Purity Water Systems and Healthcare Designers Guidelines by Dan Heilman of Siemens Industry Inc.	Westwood Tavern & Tap 1385 N. Meacham Rd Schaumburg, IL
June 21, 2013	ASPE Chicago Chapter Golf Outing		Hilldale Golf Club 1625 Ardwick Drive Hoffman Estates, IL
Saturday August 10, 2013	ASPE Chicago Chapter Summer Event		Schiller Woods Grove #12
September, 2013	ASPE Chicago Chapter Product Show		TBD

If you would like to present any of these topics or become a meeting sponsor, please contact Rick Butler at rbutler@lochinvar.com or 224.238.8515